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The Third Plan Mid-term Appraisal

GOVERNMENT OF INDIA
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The Third Plan
Mid-term Appraisal

PREFACE

The mid-term appraisal of the Third Five-Year Plan has been undertaken with the object of focussing attention on those aspects of the implementation of the Plan which require special attention at this stage, so that more rapid progress may be achieved during the next two years. The report describes progress in carrying out the programmes and policies embodied in the Plan during the three years, 1961-62 to 1963-64. Wherever possible it also indicates, on the basis of information at present available, the levels of production and development which are likely to be realised by the end of the plan period.

The Planning Commission's appraisal report was considered by the National Development Council at its twentieth meeting held on November 8 and 9, 1963. In the course of a Statement which is reproduced at the end of the report, the National Development Council broadly agreed with the findings and recommendations of the Planning Commission and decided that the Central and State Governments should proceed, as a matter of urgency, to take all necessary steps to correct the existing deficiencies and ensure the realisation of the objectives and targets of the Third Plan. The Council reviewed progress in agriculture and drew attention to some of the principal directions in which efforts to increase agricultural production should be intensified. It also proposed action in other fields, such as the speedy completion of projects likely to yield early benefits, supply of raw materials for small industries and steps to bring about qualitative improvements in education and to accelerate the programme for family planning. The Council also urged that special consideration should be given to the elementary needs of the people such as the supply of drinking water in rural areas, urgent social problems like slums and unsatisfactory living conditions, and the development of the more backward regions in different States. Finally, the Council decided that in the light of the Planning Commission's appraisal report, State Governments and Central Ministries should take specific measures to improve their machinery for planning, raise the levels of administrative efficiency

and strengthen the implementation of development programmes in different sectors.

The National Development Council reviewed progress in the implementation of land reform and considered that the speedy execution of the programme of land reform was vital for increasing agricultural production and strengthening the rural economy. It called upon all State Governments to complete the implementation of their land reform programmes before the end of the Third Plan. The Council constituted a Committee of Chief Ministers under the chairmanship of the Minister of Home Affairs to review at regular intervals progress of land reform in different States and to suggest measures for strengthening and improving implementation.

The Planning Commission's mid-term appraisal of the Third Plan has also been considered by the Central Government who have generally approved of the suggestions contained in it. Among the suggestions approved are the following. Firstly, in all important fields project studies should be undertaken as part of continuing programmes of work. Early strengthening of technical organisations for project studies and designs is essential for ensuring that changes in cost estimates are kept to the minimum and construction schedules are maintained. This will also facilitate advance action in relation to future projects and make for greater continuity in planning. Secondly, the question of reducing costs has to be pursued systematically. For this purpose, besides high level technical committees for reduction in construction costs at the national and State levels, heads of major projects should be given the assistance of well-equipped cost reduction units. Thirdly, specific programmes for import substitution should be worked out in respect of components, raw materials and equipment in different industries. These have to be based on forward planning for the coordinated use of the available indigenous capacities and utilisation of the results of scientific and technological research.

To secure complete coordination between different agencies at the national level in matters relating to agricultural development, the Central Government have also decided to constitute an Agricultural Production Board under the chairmanship of the Minister of Food and Agriculture.

November 11, 1963.

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CHAPTER I

INTRODUCTION

THE Third Five Year Plan was conceived as the first phase of a period of intensive development leading towards a self-reliant and self-generating economy. The Plan also sought to give a more precise content to the social objectives of the Constitution and to ensure a significant advance towards the achievement of socialism and of equal opportunity for every citizen. Planned development during the preceding decade had laid the foundation for rapid economic growth. Accordingly, the Third Plan postulated an increase in agricultural production of 30 per cent, in industry of 70 per cent and in national income of 30 per cent.

2. Over the past two years, the national effort has been larger and more broad-based than before. Though the advances made in several basic branches of industry, including steel, machine-building, coal, power and transport are substantial and have helped strengthen the economy, the first half of the Third Plan has been, for a variety of reasons, a period of slow economic growth, increase in national income being only of the order of 5 per cent. The present appraisal of progress in carrying out the Third Plan has been undertaken with the object of identifying those elements in policy and implementation which need special attention, so that much greater progress may be achieved during the rest of the plan period.

3. In reviewing recent developments, it has to be remembered that for over a year the Third Plan has been implemented against the background of a serious threat to national security and a continuing emergency which has brought new burdens and responsibilities. The National Development Council viewed the Plan as an integral part of national defence and, in November 1962, called for its successful and speedy implementation with the necessary reorientation to meet the emergency. Accordingly, the immediate priorities of the Plan were re-examined with a view to adapting it to the urgent requirements of defence. In particular, plans for industry, transport, power and scientific and technical manpower were stepped up and a larger agricultural effort was proposed. Economies in construction and in the use of scarce materials were also stressed. Plans of economic and social development are an essential means for meeting the two-fold challenge of development and defence. This challenge demands both more rapid economic development and greater progress towards social justice.

4. Efforts to mobilise resources for development, which were already under way, were considerably enlarged under the stress of the emergency. Against a target of additional taxation of Rs. 1,750 crores indicated in the

Third Plan, during the first three years of the Plan, the Central and State Governments have undertaken taxation yielding about Rs. 2,400 crores over the plan period. Investment in many strategic areas has been at a high level and has also increased steadily from year to year. With assistance from friendly countries and from international agencies, foreign exchange requirements have been substantially covered in some sectors, notably in power, expansion of steel plants, railways, ports and oil. However, in a number of important fields there are still significant gaps and import requirements for components and raw materials are not being adequately met.

5. The first year of the Third Plan was marked by power shortage and transport difficulties, specially in respect of coal. A series of short-term measures were taken to deal with these problems. At the same time, to avoid imbalance in the future, plans for the development of power and transport were augmented appreciably. From the beginning, efforts have also been made to intensify the programme for agricultural development and to improve its implementation. More recently, high level study teams were sent out to confer with the States and devise further measures for accelerating agricultural production. The progress of industrial programmes has also been closely followed and steps to improve the pace of utilisation of external assistance allocated to projects have received special attention. Developments in different sectors of the economy, the problems which have been encountered and the policies and measures which are being adopted are described at some length in the relevant chapters of this report. It may be useful here to bring together some of the more important aspects to which the mid-term appraisal of the Third Plan has drawn special attention.

6. In the Third Plan the largest emphasis was placed on agriculture, which obviously holds the key to rapid economic growth. During the first two years of the Plan, seasonal conditions were unfavourable, and the actual levels of production of foodgrains and other crops did not correspond with the efforts being made to increase agricultural production. In the nature of things, in a country like India in which, over large areas, the volume and distribution of rainfall are a decisive factor in agriculture, it is difficult to achieve a steady rate of growth in agricultural production from year to year. This makes it all the more essential to secure high yields per acre in areas with irrigation and assured rainfall. The community development movement with its basic framework of extension services now covers almost the entire countryside. In the scheme of development greater emphasis has, therefore, to be given to the development of scientific and progressive agriculture in an intensive manner in areas with relatively favourable agricultural conditions. This approach is being followed in a number of areas which have been marked out for intensive development. Efforts are also being made to make available for agricultural development increasing resources in finance, supplies and personnel. In those areas which are less developed or have considerable unemployment and under-employment, the agricultural effort is being stimulated

through the rural works programme for the better utilisation of the available manpower resources. It is to be hoped that Panchayati Raj institutions will give the utmost emphasis possible to the development of agriculture and the achievement of high yields and will try to harness the manpower and other local resources of each area.

7. Effective organisation and coordination at each level is essential to the success of agriculture. Considerable thought has been given to this aspect, for instance, in respect of coordination between agencies concerned at the State and district level with agriculture, community development, co-operation and irrigation, and the strengthening of extension machinery at the block and village levels. Problems relating to the utilisation of irrigation, specially from large projects, have also received continuous attention and much stress has been laid on each area having a detailed plan of operations for achieving speedy utilisation of irrigation and attaining the maximum agricultural potential. The specific tasks and processes involved are by no means easy of fulfilments, but the efforts now in progress are correctly conceived and should yield results.

8. Since the beginning of the Second Plan, valuable experience has been gained in planning for industrial development and executing industrial projects. The importance of coordination and inter-related planning for industry, power and transport is fully appreciated, and the Ministries concerned and the Planning Commission endeavour to maintain a close watch on common problems in these sectors. It is also recognised that the provision of facilities for power and transport should be undertaken, to the extent possible, well in advance of actual requirements. These considerations have been borne in mind in implementing the Third Plan and also in planning for the future. However, there are some aspects where the existing arrangements need to be considerably strengthened. Thus, in a number of projects, estimates of cost and estimates of time required have tended to be optimistic. To an extent, changes in cost estimates and in the time schedules are inevitable, but it is essential that they should be kept to the minimum. This object can be achieved if careful technical and economic studies are undertaken at the stage of planning and systematic programming is undertaken in relation to all phases of a project. From this aspect, the main stress has to be on strengthening the existing technical organisations and, where necessary, establishing new organisations for preparing technical project studies and designs. In major fields, such studies should be undertaken as part of continuing programmes of work. This would facilitate the correct selection of projects. It would also make for greater continuity in planning so that, as investigations are completed, new projects could be approved for necessary action.

9. In the plans of industrial development, public and private sectors have important complementary roles. In the Third Plan a wide range of

important tasks were assigned to the private sector. However, progress on the part of private industry has lagged behind in a number of key areas, such as, alloy tool and stainless steel, steel castings, steel forgoings, machine tools, fertilisers, cement, paper and newsprint and in some chemical industries. Shortfalls in these fields will have repercussions on future development and it is necessary to devise appropriate means for ensuring that major targets assigned to the private sector are in fact realised in keeping with the requirements of the economy and the scheme of the Plan.

10. The Third Plan had visualised a substantial effort for increase in exports. The programme for exports is now being implemented as an integral part of the country's development plans. There has been already a measure of response, but to raise the annual level of exports by about a third over the five-year period and to double exports by the end of the Fourth Plan, are uphill tasks. In this connection, reference may be made to a problem, which affects production both in the private and the public sectors. There is at present an appreciable gap between the available capacities in a number of industries and the extent to which these are being utilised. In part this is a question of allocating foreign exchange to meet critical shortage of components and raw materials. This difficulty becomes easier to resolve to the extent to which exports expand and external assistance is available for non-project imports. At the same time, it is important that requirements of imported components and raw materials in the future should be kept to the minimum. This calls for systematic import substitution in each industry and forward planning for the effective and coordinated use of all available indigenous capacities.

11. An important aim in the Third Plan is to ensure substantial expansion in employment opportunities and fuller utilisation of the country's manpower resources. As against increase in non-agricultural employment of 10.5 millions visualised over the plan period, it is reckoned that in the first three years about 5 million additional jobs might be created. Thus, relatively larger numbers have to be supported by agriculture. Development programmes in the Plan are now supplemented by the rural works programme, which is being implemented in 800 development blocks and is to be steadily expanded. While implementing plans of development, more pointed attention needs to be given to the size and complexion, of the problem of unemployment and under-employment in each area. Programmes and schemes in the Plan should be so worked that they produce the maximum impact on the total employment situation in each region.

12. In education and in social development programmes, generally considerations of quantitative expansion have tended to receive greater attention than measures to raise standards. In all programmes for the development of human resources, it is essential to stress improvement in the quality of the service rendered and in standards of training and teaching.

13. Improvements in living conditions and the rate of economic progress are closely related to the growth of population. The Third Plan stressed the key importance of family planning for stabilising the growth of population. A greatly enlarged programme with considerable strengthening of the machinery for implementation, both at the Centre and in the States, is an imperative need. The participation of the entire medical profession, of social workers and voluntary associations and of all organised undertakings and offices should be enlisted in this programme along with the various official agencies entrusted with its execution.

14. In the implementation of plans and policies there is need for greater emphasis on the social objectives of planned development, in particular, on bringing about reduction in disparities in income and wealth and ensuring the basic necessities to the weaker sections of the population. On these aspects of development, a number of proposals were set out in the Third Plan, including those relating to expansion of opportunities for employment, development of education and social services, grants of scholarships and other forms of aid, provision of minimum amenities in rural areas, extension of social security and adoption of appropriate fiscal and other policies.

15. The existing planning machinery in the States needs early strengthening in view of the wide range of responsibilities being cast upon State Governments. The aspects to be specially emphasised are evaluation, manpower planning, mobilisation of resources, technical project studies, arrangements for obtaining statistical information and systematic reporting and review of progress.

16. While efforts to mobilise resources for the Plan have been on the whole encouraging, there are some States which are experiencing difficulties in raising resources on the scale envisaged in their plans. Additional taxation undertaken in these States has been low in comparison with their initial targets. These States will find it difficult to fulfil their plans without further steps to strengthen their financial position. In this connection, it may be mentioned that in some States there has been recently a degree of pressure to shift funds as between different heads of development, thus departing from the scheme of allocations agreed under the Five Year and the Annual Plans. Such diversions are likely to cause set-backs in development in fields like agriculture and cooperation and may affect social programmes to which high priority has been given. It is important that planning procedures in the States should be designed to avoid diversions of funds which may upset national and State priorities.

17. One of the main lessons of the emergency bears on the need to view the needs of defence and development together, both in the Third Plan and in planning for the future. Defence production and civil production

have to be viewed together at each step in terms of a common and continuing economic plan, which comprehends production, transport, power, research, training and use of technical and scientific manpower, as well as, wider social goals. The emergency demands ever stricter tests of efficiency, speed and initiative. Already, the Third Plan had vast administrative implications and called for high standards of efficiency, coordination and concentration of resources at vital points and the participation of millions of people in the national endeavour. The emergency has further enhanced the significance of these conditions.

CHAPTER II

ECONOMIC BACKGROUND

National Income and Production Trends.—In terms of national income growth, the achievement in the first two years of the Third Plan has been considerably less than what was anticipated at the beginning of the Third Plan period. In the two-year period 1961—63, the annual rate of increase in national income is estimated to have been about 2·5 per cent as compared to the rate of something over 5 per cent envisaged in the Third Plan. In order that the Third Plan target for national income growth may be reached, the annual growth rate in the remaining three years of the Plan has, therefore, to be substantially higher than the annual growth rate achieved in the past two years.

2. In assessing the reasons for the relatively low rate of national income growth in the first two years of the current Plan, it is necessary to bear in mind that, despite the substantial progress achieved in the transport, power and industries sectors, the agricultural sector still contributes the largest proportionate share to national output. Consequently, the trend in total national income is vitally affected by the trend in agricultural production. In the first year of the Third Plan, agricultural output was higher than in the previous year; the index for agricultural production increased from 139·6 in 1960-61 to 141·4 in 1961-62. But in the next year, *viz.* 1962-63, there was a set-back in the out-turn of foodgrains, as well as, of sugarcane, jute and oilseeds; and, in consequence, the index for total agricultural production was, according to provisional estimates, 136.8 in that year. Crop prospects during the current year (1963-64), are, however, brighter.

3. Within the agricultural sector, the trends in respect of individual crops have varied. According to the 'partially revised estimates, outputs of wheat, rice and barley showed an increase in 1961-62; but this was largely offset by a big fall in jowar production, so that the increase for all cereals was only marginal. Preliminary estimates for 1962-63 show a significant decline in both rice and wheat, counter-balanced to some extent by a recovery in jowar production. Foodgrains production, as a whole, was of the order of 77·5 million tons in 1962-63 (provisional estimates) as compared to about 79·7 million tons in both 1960-61 and 1961-62. As regards the other crops, output in each of the two years has been smaller than in 1960-61 in respect of sugarcane, whereas that of oilseeds as well as jute has been higher. Raw cotton production fell sharply to 45 lakh bales in 1961-62, but rose in 1962-63 to the 1960-61 out-turn of 53 lakh bales. As will be explained later, these variations in respect of individual crops

have had their influence on the price movements during 1961-62 and 1962-63*.

4. The relative set-back in agricultural output—especially in the output of foodgrains—is a matter for concern and, as will be explained later, a variety of measures are being taken to stimulate more rapid growth in the coming years. At this stage of an overall review, however, it is necessary to note certain features of the agricultural situation as it has emerged. It may be recalled that in both the First and the Second Plan periods, there have been wide fluctuations in agricultural output as a result of fluctuations in weather conditions. In fact, during the Second Plan period, agricultural production in 1957-58 and 1959-60, when weather conditions were adverse, was lower than in the previous years by 6·7 per cent and 3·9 per cent respectively. In comparison, output in 1961-62 has been higher than in 1960-61, and that in 1962-63 is provisionally estimated to be about 3 per cent less than in 1961-62. There is, therefore, some ground for thinking that over the years, the amplitude of fluctuation in the downward direction has been reduced somewhat. In view of this, and taking into account the special efforts now being made to increase agricultural productivity, it seems reasonable to expect that, with favourable monsoons, there could well be a sizeable increase in total agricultural output during the remaining period of the Third Plan.

5. Compared to the agricultural sector, the performance of the industrial sector is more encouraging, though it has not been satisfactory in some respects. Industrial production increased by 6·5 and 8·0 per cent respectively in the first two years of the Third Plan. Once again, it is clear that these increases are not in consonance with the rise of something like 11 per cent per annum anticipated in the Third Plan document. But in judging the performance of the industrial sector, it is necessary to take note of the structural changes that are occurring alongside of the steady increases in output. In the programmes for industrial investment, the emphasis in the Third Plan, as in the Second Plan, has been on the development of new industries producing capital goods and basic intermediate goods. If we look at the production trends in these industries, the picture is brighter. For instance, compared to the increase of 15·6 per cent in the general index of industrial production between 1960 and 1962, the increase in the output of basic metals has been of the order of 25·8 per cent. In the same period, the output of fertilisers has gone up by 25·9 per cent; of heavy organic chemicals by 38·7 per cent; and of heavy inorganic chemicals by 53·5 per cent; of industrial machinery by 47 per cent; of transport equipment by 21

*This is based on the "Final Estimates" of crop outturn in 1962-63 and, therefore, not strictly comparable with the index for 1961-62, which is based on "Partially Revised Estimates". In the past, "Final Estimates" (which are in fact the first or preliminary estimates) have often shown a smaller output than the "Revised Estimates" ; this fact has to be borne in mind in assessing the available data for 1962-63.

per cent; of electrical machinery by 18·2 per cent; and of electricity generation by 30·6 per cent. If, in spite of these increases, the aggregate index shows only a moderate rise, it is because the additional output in consumer goods industries—which have a large weight in the total index—has been comparatively less. Cloth production in the mill sector of the cotton textile industry was actually smaller in 1962 than in the previous years; but this was more than offset by the increase in the output of the decentralised sector. In other words, production increases in the capital and intermediate goods industries, which are crucial for the attainment of a self-reliant economy, have been larger than in the general index.

6. It should, however, be added that for the attainment of the Third Plan targets, in the case of some industries, the rate of growth in their output has to be higher than in the last two years. As will be explained later, the implementation of several important Plan projects in both the public and private sectors has been behind schedule for various reasons. Several steps are being taken to avoid delays in implementation and remove the impediments of better utilisation of installed capacity. While these measures may be expected to improve the trends in industrial production to some extent, the actual increase in output will be markedly influenced by increases in the supply of raw materials and components—indigenous as well as imported. It should also be mentioned in this context that many of the newer industries being set up in the economy are technically more complex and the process of adapting them to our conditions is often a time-consuming one. Consequently, the scope for reducing the average time-lag between the making of investments and the realisation of outputs may not be the same in all industries. But, as procedural or administrative delays are reduced and inter-related investments come to fruition, it would be reasonable to expect a significant improvement in the response of total industrial output to the investments undertaken in the Plan.

7. As is well known, shortages in the supply of raw materials have tended to cause a slower increase in actual output as compared to the addition to production capacity in several industries. While the increase in aggregate national product has, therefore, been less than anticipated in the Plan, nevertheless there has been no proportionate set-back on the investment side. Firm estimates of aggregate investment and savings in the economy during the past two years are not available; but judging from such partial data, as are available, it would appear that not only has investment in the strategic areas been high but it has also been increasing at an appreciable rate. In the public sector, for instance, investment made by the Central Government on Plan projects is estimated to have risen from about Rs. 430 crores in 1960-61 to about Rs. 690 crores (revised estimates) in 1962-63. The budget estimates for 1963-64 are of the order of Rs. 840 crores. At the same time, Central assistance to States for Plan projects, the

bulk of which would be for capital formation purposes, has risen from Rs. 252 crores in 1960-61 to about Rs. 430 crores in 1962-63 (revised estimates). In the private industrial sector, judging from data relating to capital issues, bank and other institutional credit to industry imports of capital goods, etc., aggregate investment in the first two years, though not the pattern, seems to be more or less in tune with the amounts envisaged for the five-year period. Making allowance for the net inflow of foreign resources during the period, it would also appear that a part of the additional investment has been financed through additional domestic savings. By and large, therefore, it seems probable that the aggregate investment/income and savings/income ratios have increased to a significant extent in the first two years of the Third Plan.

8. Additional employment generated in the non-agricultural sector during the first two years has been estimated at 3·2 millions. Precise estimates of additional employment in the agricultural sector are not available. Concurrently with the increase in employment, there has been an increase in the number of people seeking employment. By and large, therefore, it would appear that no serious dent has been made on the problem of un-employment in the country; and the number of persons seeking employment through the Employment Exchanges has risen during the last two years from 15·6 lakhs to 24·8 lakhs. In respect of certain categories of technical personnel, however, the supply has not been adequate An appraisal of the employment situation is given in a subsequent chapter.

9. *Price Trends.*—Given the trends in output and investment mentioned above, and given the tight position in respect of foreign exchange, a pressure on domestic prices was to be expected. However, it was not until the second year of the Plan that this pressure became manifest. In 1961-62, the general price index showed a decline of 3·6 per cent; this came about as a result mainly of the increased availability of agricultural commodities from the 1960-61 crop. Since April 1962, however, the general trend has been upward, with the trend in the price of food articles being steeper than that of the general index. Over the financial year 1962-63, the increase in the general index was of the order of 3 per cent; but since the end of March 1963, the index has risen by over 8 per cent—from 126·8 on March 30, 1963 to 137·3 on September 14, 1963. Once again, the bulk of the increase has been in the category of food articles, especially rice, sugar and gur.

If one takes the period of nearly two and a half years since the commencement of the Third Plan, the increase in the general price index would work out to about 7 per cent. This is not in itself unduly high; but the problem arises from the fact that this rise is super-imposed on the increase that had occurred in the Second Plan period and, more importantly, it derives from rather big increases in the prices of essential consumer articles

since the beginning of 1963. Even allowing for the seasonal increases in respect of several food articles, the basic trend in prices remains upward, and, therefore, has to be taken cognisance of in appraising the current situation.

10. The possibility of considerable pressure on prices during the plan period was visualised in the Third Plan document. It was recognised that a growing population, rising money incomes and enlargement of the investment programme would all contribute to a substantial addition to the demand for essential consumption articles. It was in relation to this increase that the targets for output in the agricultural sector, as well as, in certain consumption goods industries were set. However, the Plan recognised that. from time to time, imbalances between supply and demand might become manifest in respect of particular commodities and call for remedial action for controlling price increases. Buffer stock operations, regulation of distributive agencies and, in extreme cases, direct controls on prices and distribution were indicated as appropriate policy measures, along with fiscal policies and the continuing emphasis on policies directed towards increasing output.

11. In the middle of 1962, it became apparent that the prices of several essential commodities were under pressure and a series of measures were taken to hold the price-line. In particular, attention was focussed on securing greater control over prices of rice, sugar, textiles, drugs and medicines, and certain other basic consumption commodities. The procurement programme for rice was stepped up and measures were taken to tighten the system of licensing of wholesale traders. Where shortages in supply were particularly acute—as for instance in West Bengal and Assam—larger releases were made from Government stocks through an increased number of fair price shops and consumers' cooperative stores. In addition, to supplement the rice availabilities, issues from wheat stocks also were enlarged. In the case of sugar, it was possible in the initial stages to counteract the effects of the serious fall in sugar production in the 1962-63 season through an increased draft on stocks carried over from the previous season. However, in April 1963, when it became necessary to tighten the system of sugar distribution, the sugar control order was passed; under which prices at ex-factory, wholesale and retail stages have been fixed and quotas allocated to States. Steps have also been taken to regulate the trade in gur and khandsari. Measures to secure a sugar output of the order of 33 lakh tons in the 1963-64 season have been decided upon. While these measures have had some effect, the rise in food articles prices since April 1963, has been as much as 12·7 per cent (up to September 28, 1963). This is a matter of continuing concern and further action may become necessary to arrest this trend.

12. As in the case of rice and sugar, a series of measures have been or are being taken to keep the prices of textiles and drugs and medicines

under reasonable control. In respect of certain other commodities, such as kerosene, prices have gone up since April 1963, as a result of new taxes introduced in the Budget. With a view to restricting the price increase in the case of these commodities, orders have been issued under the Defence of India Rules specifying the permissible increase. In addition to all of these measures, the programme for enlarging the network of consumer co-operative stores, departmental stores, fair price shops and similar controlled outlets at the retail stage has also been intensified.

13. As the administrative arrangements for implementing the type of measures mentioned above get into their proper stride, their effectiveness as instruments of price regulation is expected to be more clearly seen than in the past. To the extent that the pressure on prices derives from continuing shortages in supply, rapid increase in the production of essential commodities is necessary for lasting price-stability. This gains added importance from the fact that the defence offtake of some of these commodities is likely to increase substantially as the programme for defence build-up gathers momentum. There is also the other side of the picture, namely the need to mobilise both internal and external resources for defence and development on a very much larger scale than was necessary in the first two years. Price increase attributable to policy decisions have to be viewed as necessary instruments for enlarging the investible resources of the community and enabling the priority industries to expand in the manner required. In other words such policy-oriented price increases have to be distinguished from price rises which are mainly a reflection of inadequacies in supply or distribution arrangements and they should be accepted by the community as both inevitable and desirable.

14. *Trends in money supply.*—Turning to the overall indicators in the monetary sphere, there was an increase of Rs. 441 crores, or about 15 per cent, in money supply with the public in the period April 1, 1961 to end of March 1963. This increase was attributable entirely to the borrowings from the banking sector of both Government and the private sector. Over the two-year period, net Government indebtedness to the banking system increased by Rs. 491 crores*, distributed more or less equally between the two years. In the case of the private sector, however, the increase in bank credit during 1962-63 was much larger than in the previous year—Rs. 210 crores in 1962-63 as against Rs. 137 crores in 1960-61. At the same time, there was in 1962-63 a similar increase in the commercial banks time-liabilities. On a net basis, therefore, the indebtedness of the private sector to the banking system* did not increase in 1961-62, whereas it showed a rise of Rs. 113 crores in the next year. A good part of the increase in money supply with the public in the second year of the Third Plan was

*Adjusted for transfer of P.L. 480 deposits from State Bank of India to the Reserve Bank of India.

thus related to an increase in commercial bank credit to the private sector—largely the private industrial and trading sectors. With the balance of payments being in deficit during both the years, there was no expansionary effect on money supply emanating from that source.

15. In the current year, between April and August, 1963, there was a considerable contraction in bank credit to private sector (Rs. 97 crores) and a substantial accretion to time deposits (Rs. 82 crores) reflecting the normal return flow of funds to the banking sector. Simultaneously, the open market operations of the Reserve Bank of India and new Government loan floatations in July 1963, have raised the banks' investment in Government securities (by Rs. 169 crores) as also the Government indebtedness to the banking system (by Rs. 179 crores). Money supply, however, recorded a small rise of Rs. 40 crores only during the entire five months' period.

16. Since the expansion in money supply more than kept pace with the trend in aggregate output, it is possible that it had some price effect; but, it is difficult to determine whether this effect was a material one. In actual fact, the policy has been to keep credit expansion under control, through general, as well as, selective measures. As mentioned earlier, the magnitude of bank credit to the private sector did not pose a serious problem in 1961-62; and the three-tier system of lending rates, in respect of Reserve Bank credit to commercial banks (which had been introduced in October 1960) was continued. In the next year, however, as bank advances to the private sector tended to go up, the policy regarding Reserve Bank lending to commercial banks was modified and, in October 1962 a limit on such borrowings was imposed. Early in 1963 the slab system of lending rates was changed by raising the bank rate to 4½ per cent and restricting commercial bank borrowings at this rate to 50 per cent of their permissible limits.

17. The stock markets, which had continued to be buoyant since 1958, turned bearish after July 1962 and this trend was further accentuated after the declaration of emergency in October 1962. Between July 1962 and June 1963, the index of share prices fell by 16 per cent; while part of this fall was in the nature of a corrective to the large rise in share prices that had occurred between 1958 and 1961, a major factor, affecting sentiment in the capital market, was the situation caused by the emergency.

18. The disturbed conditions in the market affected the capital raised by industries in the private sector by way of market issues. Though the consents granted by the Controller of Capital Issues to private sector companies increased from Rs. 133 crores in 1961 to Rs. 163 crores in 1962, actual raisings through shares and debentures amounted to only Rs. 100 crores as against Rs. 99 crores in the previous year. This was offset to some extent by an increase in the loans sanctioned and disbursed by term-lending

institutions like the Industrial Finance Corporation, the Industrial Credit and Investment Corporation of India and the Refinance Corporation for Industry. With the new capital issue market being rather sluggish, these credit institutions, as well as, the commercial banks may face an increased demand for funds from the private industrial sector.

19. *Public Finance.*—Taking the Central and State Governments together, total budgetary outlay for developmental as well as non-developmental purposes increased from Rs. 2,616 crores in 1960-61 to Rs. 2,817 crores in 1961-62 and Rs. 3,564 crores (revised estimates) in 1962-63. The budgeted outlay for 1963-64 is of the order of Rs. 4,173 crores, a substantial part of the increase over the previous year being attributable to the larger defence outlay that has had to be undertaken. As against this expenditure, the revenue receipts of the Central and State Governments have together amounted to Rs. 1,723 crores in 1960-61, Rs. 1,947 crores in 1961-62, Rs. 2,237 crores in 1962-63 (revised estimates) and Rs. 2,694 crores in 1963-64 (budget estimates). The excess of expenditure over revenue receipts has in all the years been met to a substantial extent through public borrowings, external assistance and miscellaneous receipts on capital account. Deficit financing, which includes short-term as well as long-term borrowing from the Reserve Bank, was of the order of Rs. 168 crores in 1961-62; for 1962-63, the actual overall deficit would be of the order of Rs. 171 crores. It will, thus, be seen that the progressive increase in Government expenditure has been met by larger revenue receipts arising from additional taxation, as well as, improved receipts on the capital account, rather than through a progressive increase in budgetary deficits.

20. In regard to Plan outlay, the revised estimates for 1962-63 are placed at Rs. 1,414 crores as compared to Rs. 1,130 crores in 1961-62. Outlay in 1963-64 will be of the order of Rs. 1,654 crores (budget estimates). Details of plan outlays and their financing are given in a subsequent chapter.

21. *Balance of Payments.*—Turning finally to the balance of payments position, the first two years of the current plan have witnessed some improvement in regard to the balance of trade. Compared to a trade deficit of Rs. 475 crores in 1960-61, the excess of imports over exports was of the order of Rs. 337 crores in 1961-62 and Rs. 414 crores in 1962-63 (including Goa's imports and exports). This resulted partly from the fact that imports in both 1961-62 and 1962-63 were somewhat less than in 1960-61; it was also due in part to the increase in export receipts from Rs. 631 crores in 1960-61 to Rs. 667 crores in 1961-62 and Rs. 682 crores in 1962-63. However, there has been a worsening in net invisible receipts since 1960-61, so that the reduction in the balance of payments deficit on current account has been smaller than that in the trade deficit. The current account deficit,

after declining from Rs. 431 crores in 1960-61 to Rs. 349 crores in 1961-62, went up to Rs. 424 crores in 1962-63; but this increase in the current account deficit in 1962-63, has been more than covered by a rise of Rs. 121 crores in disbursements of foreign assistance (including P. L. 480 aid). Consequently, both the draft on the foreign exchange reserves, as well as, the gross drawings on the I.M.F. have been smaller in 1962-63 than in the previous year. While there has thus been some improvement in the country's balance of payments during 1962-63, the basic position still continues to be one of serious pressure on foreign exchange resources. The present position and prospects regarding foreign exchange availabilities, including external assistance are examined in greater detail in a later chapter.

CHAPTER III

PLAN OUTLAY AND TARGETS

THIS Chapter reviews briefly progress in relation to various production and development targets and in outlays during the period 1961-62 to 1963-64. It may be mentioned that the statistics for 1960-61 given here differ in some instances from those in the Third Plan because, when the Plan was formulated, final data for that year had not yet become available. Secondly, it will be noticed that different chapters in this report mention achievements during the first two years of the Third Plan and in some cases the targets for the third year. In fact data at present available for 1962-63 are provisional and subject to revision, in some cases perhaps upwards. For instance, in respect of agricultural production, 'revised' estimates are invariably higher than the 'final' estimates which have recently become available. Thirdly, estimates of likely achievements for the plan period as a whole given in this report are also tentative and conditional. However, they are the best that can be offered at present; and it is proposed to utilise them as the basis for studies which have been recently initiated for the preparation of the Fourth Plan. Finally, in respect of information on outlays also, there are certain limitations. At this stage 'actual' expenditures are available only for 1961-62. The 'revised' estimates for 1962-63 will be modified in due course. For 1963-64 only plan outlays and budget provisions are at present known.

2. The Third Five Year Plan provides for a total investment of Rs. 10,400 crores over the five years 1961-62 to 1965-66, of which investment in the public sector accounted for Rs. 6,300 crores and in the private sector for Rs. 4,100 crores.* In addition to investment of Rs. 6,300 crores, current outlays to the extent of Rs. 1,200 crores were also envisaged, making a total outlay in the public sector of Rs. 7,500 crores. Compared to this, the cost of the programmes proposed for the public sector was estimated at about Rs. 8,300 crores, including a provision of Rs. 200 crores for inventories. The greater part of the gap related to the Central Government's own programmes. These entailed a total cost of Rs. 4,076 crores, while the financial provision for them within the outlay of Rs. 7,500 crores amounted to Rs. 3,600 crores. A few supplementary items of development, notably, programmes for creating additional employment opportunities, were mentioned in the Plan, but the financial resources for them were to be found as the Plan proceeded.

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*Excluding the estimated transfer of Rs. 200 crores from the public to the private sector.

OUTLAYS DURING 1961—64

3. The total outlay of the Centre and the States during the period 1961—64 is estimated at about Rs. 4,200 crores or about 56 per cent of the five-year provision. Expenditure in 1961-62 amounted to 15 per cent of the five-year outlay and in 1962-63 to 19 per cent. Expenditure in 1963-64 is reckoned at about 22 per cent. The following table shows the progress of expenditure under the main heads of development year by year :

TABLE 1

Outlay by head of development, 1961—64

(Rs. crores)

Major head	1961-66 Financial Provision	1961-62 (Actual)	1962-63 (Revised)	1963-64 (Budget)	1961—64 Total	1961—64 As % of col. 2
1	2	3	4	5	6	7
Agriculture and Community Development	1,068	147	187	227	561	53
Major and Medium Irrigation including Flood Control	650	104	120	117	341	52
Power	1,012	139	183	247	569	56
Industry and Minerals	1,520	186	258	365	809	53
Village and Small Industries ..	264	38	44	44	126	48
Transport and Communications ..	1,486	302	361	389	1,052	71
Social Services and Miscellaneous	1,300	214	261	265	740	57
*Inventories	200	—	—	—	—	—
TOTAL ..	7,500	1,130	1,414	1,654	4,198	56

It will be seen that during 1961—64 outlay on transport has been proportionately much higher than in other sectors. Also outlay on agriculture, power and industry has been sharply stepped up from year to year. In view of the strain on transport and power, in the first year of the Third Plan, particular attention has been given to the speedy implementation of development plans in these sectors. Their foreign exchange requirements were covered in substantial degree at an early stage in the Plan. Additional rail and road programmes were taken up with a view to increasing capacity for the movement of coal. With the onset of the emergency substantial increases in road programmes were agreed to besides certain additions in the Railway programme and in the programme of the Posts and Telegraphs Department.

*Expenditure in respect of Inventories is distributed under various heads.

4. The relative proportions of outlay under different heads envisaged in the Third Plan have been maintained under most heads. However, for reasons explained above, Transport and Communications account for 25 per cent of the total outlay during the period 1961—64 compared to 20 per cent in the Plan. There has also been some increase in the States in the relative proportion of outlay on Power. The distribution of outlays in the States during 1961—64 is shown in the table below :

TABLE 2

Distribution of outlays, 1961—64

(Rs. crores)

Major head	Total Centre and States				States			
	1961—66		1961—64		1961—66		1961—64	
	Outlay	%	Outlay	%	Outlay	%	Outlay	%
Agriculture and Community Development ..	1,068	14	561	13	919	25	494	24
Major and Medium Irrigation including Flood Control	650	9	341	8	630	17	334	16
Power ..	1,012	13	569	14	880	23	517	25
Industry and Minerals ..	1,520	20	809	19	70	2	51	3
Village and Small Industries ..	264	4	126	3	137	4	57	3
Transport and Communications	1,486	20	1,052	25	226	6	139	7
Social Services and Miscellaneous	1,300	17	740	18	863	23	443	22
*Inventories ..	200	3	—	—	—	—	—	—
TOTAL ..	7,500	100	4,198	100	3,725	100	2,035	100

5. When the Third Plan was formulated, it was thought that, subject to review of economic conditions and assessment of resources from year to year, outlays in the States might be phased somewhat as follows : 14 to 15 per cent in 1961-62, 17 to 18 per cent in 1962-63, 20 to 21 per cent in 1963-64, 22 to 23 per cent in 1964-65 and 24 to 25 per cent in 1965-66. The actual outlay in 1961-62 in the States amounted to 15 per cent of the five-year cost of programmes included in their plans. For 1962-63 the proportion is expected to be 18 per cent. State plans for 1963-64 provide for a total outlay of nearly 20 per cent of the five-year total. Over the

*Expenditure in respect of Inventories is distributed under various heads.

three years, for States taken together, outlay on development comes to about 53 per cent of the five-year total. There are considerable variations between States ranging from less than 50 per cent in the case of four States to more than 60 per cent in the case of three States. Outlays in different States and Union Territories during the first three years of the Plan are shown in Statement I appended to this Chapter. Outlays under different heads in the States are set out in Statement II at the end of this Chapter. In Union Territories expenditure over the first three years amounts to about 64 per cent of the five-year total. It may be added that financial provisions for development in Goa are being determined on an annual basis and part of this expenditure is incurred directly by Central Ministries, specially by the Ministry of Transport.

PRODUCTION AND DEVELOPMENT

6. Progress in realising the targets of production and development in the Third Plan is described in the relevant chapters. Information concerning a number of important items, including the likely achievements over the plan period, is set out in Statement III appended to this Chapter. As regards agriculture, estimates of production given in the Third Plan were based on the completion of various technical development programmes for which the Plan provided, namely, irrigation, soil conservation, dry farming and land reclamation, supply of fertilisers and manures, seed multiplication and distribution, plant protection and improved agricultural practices. As was stated in the Third Plan, since weather conditions are always a dominant element in agriculture, at best the usual methods of calculation can only provide rough estimates rather than firm targets.

It is realised that, compared to the targets of development under different heads in the Third Plan, there will be shortfalls in respect of fertilisers and area benefited by major and medium irrigation schemes. Under some of the other heads also, there may be shortfalls unless the present tempo of work is greatly increased. Moreover, until recently, organisational and administrative efforts and resources devoted to the implementation of agricultural production programmes have not been commensurate with the requirements of the Plan. On present indications, in comparison with estimates in the Third Plan, there may be a shortfall of the order of 3 to 5 million tons in the output of foodgrains. There may also be some shortfall in cotton and oilseeds. In respect of jute and sugarcane, however, the estimates of production will be achieved. The estimates for rubber, coffee, tea and tobacco are also expected to be realised. In the section on Agricultural Production suggestions have been made for strengthening the implementation of agricultural development programmes and intensifying production efforts, specially in areas with irrigation and assured rainfall and in those selected for the intensive development of different crops.

TABLE 3

Progress during 1961—64 : *Selected Targets*

Item	Unit	1960-61	1961-62	1962-63	1963-64 (target)	1961—66 Plan target/ estimate	1961—66 Likely achievement
1	2	3	4	5	6	7	8
Nitrogenous fertilisers (consumption) ..	000 tons of N	200	280	350	450	1,000	800
Irrigation : Major & Medium Potential	million acres (gross)	12·09	12·81	14·27	16·34	29·47	23·16
Utilisation ..	million acres (gross)	8·59	9·40	10·60	13·08	22·77	18·60
Power: Installed capacity:	million kW	5·58	6·03	6·72	7·75	12·69	12·50
Production of :							
Steel-ingots ..	million tons	3·3	4·27	5·39	5·74	9·2	7·8
Aluminium ..	000 tons	18·2	19·4	41·97	50·0	80·0	68·0
Machine tools ..	value in Rs. crores	7·24	8·50	11·48	14·50	30·0	25·0
Sulphuric acid	000 tons	354·0	428·2	474·0	539·0	1,500·0	1,200·0
Cloth:							
mill-made ..	million yards	5,048	5,100	4,921	5,200	5,800	5,550
handloom and khadi	million yards	1,995	2,320	—	—	2,960	2,750 to 2,810
Minerals:							
Iron ore ..	million tons	10·7	12·6	—	—	30	25
Coal	million tonnes	55·5	55·2	63·8	69·04	98·6	89·9
Index number of Industrial production ..	1950—51=100	195	206	222	—	329	—
Railways:							
Freight carried	million tons	153·8	158·0	174·7	191·5	245·0	241·3
Road transport:							
Commercial vehicles on roads	000	210	—	270	—	365	330
Shipping tonnage	lakh GRT	8·6	9·1	10·6	—	10·9	15·0
General Education:							
Students in schools ..	millions	44·7	49·9	54·4	58·8	64·4	68·2
Technical Education:							
Engineering and technology—							
degree level (annual admission)	000	13·8	15·9	17·2	20·4	19·1	23·1
diploma level (annual admission)	000	25·8	27·7	30·9	36·3	37·4	47·5
Health:							
Hospital beds	000	185·6	193·3	202·0	214·0	240·1	240·1
Doctors (in practice or in service)	000	70·0	74·5	77·8	80·0	81·0	85·0

It is not necessary in this Chapter to refer in detail to statistics of production and development for individual items since these are discussed fully elsewhere. However, in this context, three general observations may be made. In the first place, under some heads, performance during the period 1961—64 is broadly in accordance with the Plan or little ahead of schedule. Examples of this are railways, road development, shipping, power, education and health. In some sectors, performance is likely to fall short of the Plan targets to a limited extent, as for instance, in machine tools, aluminium, cloth, coal and iron ore. On the other hand, there are certain crucial projects like fertilisers or establishment of a fourth steel plant in the public sector, where the lag is not only likely to be considerable but also, in the present circumstances, unavoidable.

Outlook for 1964-66

7. Indications regarding the likely achievements by the end of the plan period in different sectors given in this report are based on the assumption that the efforts postulated in the Third Plan will not only continue unabated, but will be strengthened and intensified to the extent possible. In other words, in a real sense, the relatively slow rate of progress in the past two years is a challenge to implement the Plan with the utmost efficiency and, at the same time, to mobilise all the available resources in men, money and materials for achieving the targets set in the Plan.

8. The cost of the various programmes, which was reckoned in the Plan at around Rs. 8,300 crores, would now be somewhat higher, specially on account of additions which have been made in the sectors of transport and communications and power, increases in costs and the necessity to ensure advance action on an adequate scale, so that there should be an uninterrupted flow of benefits during the first years of the Fourth Plan. Considering the actual pace of implementation in different sectors, it is reckoned that, over the five-year period as a whole, the total outlay in the public sector, subject to availability of resources, might be close to Rs. 8,000 crores. With outlay upto 1963-64 being of the order of Rs. 4,200 crores, this would leave roughly Rs. 3,800 crores for the two years, 1964-65 and 1965-66. The next two years have to be viewed together, both as the final phase of the Third Plan and as the period during which the necessary preliminary steps are to be taken for securing substantial benefits in the early part of the Fourth Plan. It is obvious that the ability to undertake outlays of this order will depend on a variety of factors, including the performance of the economy and specially the growth of agricultural and industrial production, rise in domestic savings, effective coordination and implementation at various levels and the extent to which external assistance bocomes available. Inevitably there are many uncertain factors, and the tasks immediately ahead are considerably more difficult and call for greater efficiency, speed and concentration of effort than has been realised so far.

STATEMENT I

State and Union Territories—Outlay 1961-64

(Rs. crores)

State/Union Territory	1961-66 Cost of programmes	1961-62 Actual outlay	1962-63 Revised estimates	1963-64 Plan	1961—64 Total	1961—64 As % of col. 2
1	2	3	4	5	6	7
Andhra Pradesh ..	305·0	49·7	54·0	58·5	162·2	53·2
Assam	120·0	17·1	26·6	29·5	73·2	61·0
Bihar	337·0	50·3	52·0	55·4	157·7	46·8
Gujarat	235·0	33·9	49·8	44·0	127·7	54·3
Jammu & Kashmir	75·0	10·4	13·8	15·6	39·8	53·1
Kerala	170·0	26·1	31·5	33·5	91·1	53·6
Madhya Pradesh ..	300·0	36·3	49·9	62·0	148·2	49·4
Madras	290·9	50·0	59·2	60·6	169·8	58·4
Maharashtra ..	390·0	55·9	66·3	81·6	203·8	52·3
Mysore	250·0	44·7	52·6	53·5	150·8	60·3
Orissa	160·0	23·2	29·5	32·5	85·2	53·3
Punjab	231·4	35·6	40·7	39·6	115·9	50·1
Rajasthan	236·0	33·8	36·1	36·9	106·8	45·3
Uttar Pradesh ..	497·0	70·1	81·5	89·4	241·0	48·5
West Bengal ..	250·0	39·2	57·2	65·4	161·8	64·7
TOTAL STATES	3,847·3**	576·3	700·7	758·0	2,035·0	52 9
Andaman and Nicobar Islands ..	9·8	1·1	1·5	1·7	4·3	43·9
Delhi	83·7	11·2	19·2	25·1	55·5	66·3
Himachal Pradesh ..	27·9	5·2	5·5	6·8	17·5	62·7
Laccadive, Minicoy and Aminidivi Islands	1·0	0·1	0·2	0·4	0·7	70·0
Manipur	12·9	2·1	2·5	3·2	7·8	60·5
Nagaland	7·2	0·9	1·1	2·4	4·4	61·1
N.E.F.A.	7·2	0·9	1·1	1·8	3·8	62·8
Goa	*	—	0·8	3·3	4·1	—
Pondicherry ..	6·9	0·8	1·2	1·5	3·5	50·7
Tripura	16·8	2·7	2·9	4·1	9·7	57·7
TOTAL UNION TERRITORIES ..	173·4**	25·0	36·0	50·3	111·3	64·2
GRAND TOTAL ..	4,020·7	601·3	736·7	808·3	2,146·3	53·4

*Provisions for Goa are determined on an annual basis.
**Financial provision for States for 1961—66 is Rs. 3/725 crores and for Union Territories Rs. 175 crores.

STATEMENT II

State Plans : Outlay by heads of development—1961-64 (Mid-Term Appraisal)

(Rs. crores)

Head of development	1961-66 Cost of programmes	1961-62 Actuals	1962-63 Revised estimates	1963-64 Plan	1961—64 Total	1961—64 As % of col. 2
1	2	3	4	5	6	7
Agricultural Production	183·5	20·2	28·2	35·0	83·4	45·4
Minor Irrigation ..	172·7	29·5	41·0	54·9	125·4	72·6
Soil Conservation ..	57·3	6·5	9·4	13·1	29·0	50·6
Animal Husbandry ..	45·9	4·2	6·4	6·9	17·5	38·1
Dairying and Milk Supply	30·9	4·3	6·5	6·4	17·2	55·7
Forests	42·1	4·7	6·8	6·7	18·2	43·2
Fisheries	20·9	2·0	2·7	3·7	8·4	40·2
Warehousing and Marketing	8·4	0·5	0·5	1·1	2·1	25·0
I. AGRICULTURAL PROGRAMMES ..	561·7	71·9	101·5	127·8	301·2	53·6
Cooperation	69·6	8·6	10·8	12·0	31·4	45·1
Community Development	281·9	50·9	52·8	49·3	153·0	54·2
Panchayats	28·2	2·6	2·8	2·5	7·9	28·0
II. COMMUNITY DEVELOPMENT AND CO-OPERATION	397·7	62·1	66·4	63·8	192·3	50·6
Irrigation	581·2	92·7	102·6	95·0	290·3	49·9
Flood Control ..	60·0	11·4	17·4	15·4	44·3	73·7
Power	883·1	129·4	163·9	224·1	517·4	58·6
III. IRRIGATION AND POWER	1,524·3	233·5	283·9	334·5	851·9	55·9
Large and Medium Industries	68·5	10·8	16·0	17·1	43·9	64·1
Mineral Development	11·1	2·0	2·1	2·8	6·9	62·2
Village and Small Industries	137·0	16·9	19·8	20·4	57·1	41·7
IV. INDSUTRY AND MINING	216·6	29·7	37·9	40·3	107·9	49·8
Roads	218·3	45·3	43·8	34·2	123·3	56·5
Road Transport ..	20·5	4·9	3·5	3·0	11·4	55·6
Ports and Harbours ..	4·9	0·6	0·7	0·7	2·0	40·8
Other Transport ..	2·7	0·1	0·3	0·4	0·8	29·6
Tourism	3·9	0·5	0·4	0·4	1·3	33·3
V. TRANSPORT AND COMMUNICATIONS ..	250·3	51·4	48·7	38·7	138·8	55·4
General Education ..	319·1	38·8	52·7	55·1	146·6	45·9
Technical Education and Scientific Research	69·9	8·1	10·7	12·7	31·5	45·1
Health	271·1	47·2	59·7	49·5	156·4	57·7
Housing	96·2	11·7	13·1	8·3	33·1	34·4
Welfare of Backward Classes	75·0	10·4	11·6	9·8	31·8	42·4
Social Welfare ..	10·8	0·7	1·0	1·1	2·8	25·9
Labour and Labour Welfare	25·2	1·4	2·7	6·4	10·5	41·7
VI. SOCIAL SERVICES ..	867·3	118·3	151·5	142·9	412·7	47·6
VII. MISCELLANEOUS	47·4	9·4	10·8	10·0	30·2	63·9
GRAND TOTAL ..	3,847·3	576·3	700·7	758·0	2,035·0	52·9

STATEMENT III

Third Plan: Mid-Term Appraisal—Production and Development

Item	Unit	1960-61 Position	1961-62 Achievement	1962-63 Achievement	1963-64 Target	Third Plan 1961—66 Target/Estimate	Third Plan 1961—66 Likely achievement
1	2	3	4	5	6	7	8
Agriculture							
1. Consumption of Fertilisers							
(a) Nitrogenous	000 tons of N	200	280	350	450	1,000	800
(b) Phosphatic	000 tons of P2 O5	70	72	80	160	400	250
2. Cooperation : short and medium term loans advanced	Rs. crores	202·8	228·1	267·0	331·0	530·0	—
Irrigation							
1. Major and medium irrigation							
(a) Potential	million acres (gross)	12·09	12·81	14·27	16·34	29·47	23·16
(b) Utilisation	million acres (gross)	8·59	9·40	10·60	13·08	22·77	18·60
2. Minor irrigation (additional potential)	million acres (gross)	2·5	1·8	2·1	3·0	12·8	13·8
Power							
1. Installed capacity	million kW	5·58	6·03	6·72	7·75	12·69	12·50
2. Towns and villages electrified	number	24,209	27,632	31,979	—	43,000	43,000
Industry							
1. Iron and steel							
(a) Steel ingots	million tons	3·3	4·27	5·39	5·74	9·2	7·8
(b) Saleable steel	million tons	2·4	2·9	4·0	4·3	6·8	5·8
(c) Pig iron for sale	million tons	1·1	0·97	1·06	1·06	1·5	1·2

2. Alloy, tool and stainless steel (finished)	000 tons	—	—	—	—	200	50
3. Aluminium	000 tons	18·2	19·4	41·97	50·0	80·0	68·0
4. Non-ferrous metals—Copper	000 tons	8·8	9·0	9·48	9·5	20·0	17·4
5. Industrial machinery							
(a) Sugar mill machinery	Rs. crores	4·2(*a*)	4·6(*a*)	6·42	10·0	14·0	14·0
(b) Cement machinery	Rs. crores	0·6 (*a*)	0·9(*a*)	0·7	1·2	4·5	4·5
6. Machine tools	Rs. crores	7·24(*a*)	8·5	11·48	14·5	30·0	25·0
7. Railway rolling stock							
(a) Locomotives	number	1,291(*c*)	248	246	250	1,470(*c*)	1,470(*c*)
(b) Wagons (in term of fourwheelers)	number	69,130(*c*)	19,164	25,969	32,000	117,144(*c*)	157,133(*c*)
(c) Passenger coaches	number	7,332(*c*)	1,610	1,849	1,850	7,879(*c*)	7,879(*c*)
8. Automobile and ancillary industries							
(a) Passenger cars	000 numbers	19·1(*a*)	21·78	20·84	21·0	30·0	25·0
(b) Commercial vehicles	000 numbers	27·5(*a*)	25·50	25·7	27·0	60·0	54·0
(c) Jeeps and station wagons	000 numbers	5·5(*a*)	7·3	7·44	8·0	10·0	10·0
9. Motor cycles and scooters	000 numbers	17·6	19·13	23·62	30·0	50·0	45·0
10. Ball and roller bearings	million numbers	3·2	3·3	4·0	5·5	15·0 (*b*)	15·0
11. Agricultural implements and machinery							
(a) Diesel engines (stationary)	000 numbers	43·2	43·02	45·28	50·0	66·0	66·0
(b) Tractors	000 numbers	Neg.	0·88	1·6	4·2	10·0	10·0
12. Bicycles	million numbers	1·06	1·0	1·1	1·2	2·0 (*d*)	1·6
13. Sewing machines	000 numbers	297·3	323·0	330·0	400·0	700 (*e*)	600
14. Electric transformers (33 KV and below)	million	1·39	1·98	2·40	2·5	3·5	3·5

Item	Unit	1960-61 Position	1961-62 Achievement	1962-63 Achievement	1963-64 Target	Third Plan 1961—66 Target/Estimate	Third Plan 1961—66 Likely achievement
1	2	3	4	5	6	7	8
15. Electric motors (200 HP and below)	million HP	0·73	0·86	1·03	1·20	2·5(*f*)	2·5
16. A.C.S.R. conductors	000 tons	23·6	24·8	30·47	34·00	44*g*)	55
17. Fertilisers							
(a) Nitrogenous (in terms of N)	000 tons	97·2	140·0	175·2	240·0	800	500
(b) Phosphatic (in terms of P_2O_5)	000 tons	53·0(*a*)	61·9	78·9	111·5	400	200
18. Heavy chemicals							
(a) Sulphuric acid	000 tons	354·0	428·2	474·0	539·0	1,500	1,200
(b) Soda ash	000 tons	145·0	177·9	229·9	284·0	450	350
(c) Caustic soda	000 tons	97·0	120·8	125·5	210·7	340	340
19. Drugs and pharmaceuticals							
(a) Sulpha drugs	tons	145(*a*)	156·0	196·3(*a*)	200·0	1,000·0	1,000·0
(b) D.D.T.	tons	2,786(*a*)	2,768	2,568(*a*)	2,790	2,800	2,800
20. Plastics (Polyethylene, P.V.C., etc.)	000 tons	9·5	14·7	19·0	24·0	74·0	69·5
21. Rubber manufactures							
(a) Automobile tyres	million numbers	1·49	1·59	1·76	2·50	3·00 (*h*)	3·8
(b) Bicycle tyres	million numbers	11·15	11·33	12·42	14·00	30·9	18·0
22. Paper and paper board	000 tons	343·0	365·0	393·2	425·0	700·00	580
23. Cement	million tons	7·8	8·2	8·8	9·3	13·0	12·0
24. Cotton cloth (mill made)	million yards	5,048	5,100	4,921	5,200	5,800	5,550
25. Rayon filament	million lbs.	47·0	52·9	65·0	75·0	140·0	110·0
26. Sugar	million tons	3·0	2·7	2·3	3·3	3·5	3·5

Mineral Development							
1. Coal	million tonnes	55·51	55·23	63·85	69·04	98·6	89·88
2. Iron ore (*c*)	million tons	10·7	12·6	—	—	30·0	25·0
Village and Small Industries							
1. Khadi	million yards	64·8	76·2	N.A.	N.A.	160	100-110
2. Handloom	million yards	1,930	2,244	2,452	2,250	2,800	2,650-2700
3. Sericulture (*a*)	lakh kilograms	15·0	16·6	17·8	—	23·03	21·00
4. Industrial estates (completed) ..	number	66	89	105	—	366	200
Transport and Communications							
1. Railway freight (originating tons) ..	million tons	153·8	158·0	174·7	191·5	245·0	241·3
2. Roads							
(a) Surfaced including national highways	000 kilometres	230·4	240·8	248·0	—	270·4	would be exceeded
(b) Commercial vehicles on road	000 numbers	210	—	270·0	—	365	330
3. Shipping							
(a) Total tonnage	lakh GRT	8·57	9·08	10·59	—	10·9	15·0
(b) Handling capacity of major ports	million tons	37 (33·16 actually handled)	33·16 (actually handled)	(present level of traffic—36 million tons)	—	49	49
4. Post offices	000 numbers	77	82·4	87·8	—	100	100
5. Telegraph offices	000 numbers	7·0	7·1	7·4	—	9·0	9·0
6. Number of telephones	000 numbers	463	512	591	—	760	780
Education							
1. General Education : Student in schools							
(a) Classes I-V	lakh numbers	349·9	389·8	420·9	452·1	496·4	519·7
(b) Classes VI-VIII	lakh numbers	67·1	74·5	83·3	92·2	101·7	109·3
(c) Classes IX-XI	lakh numbers	29·6	34·3	39·4	44·2	45·6	52·6
2. Technical Education Engineering and Technology :							
(a) Degree level -annual admission	number	13,284	15,850	17,232	20,430	1 9,437	23,130
(b) Diploma level-annual admission	number	25,810	27,710	30,919	36,620	37,390	47,546

Item	Unit	1960-61 Position	1961-62 Achievement	1962-63 Achievement	1963-64 Target	Third Plan 1961—66 Target/ Estimate	Third Plan 1961—66 Likely achievement
1	2	3	4	5	6	7	8
Health							
1. Institutions							
(a) Hospital beds	000 numbers	185·6	193·3	201·9	214·0	240·1	240·1
(b) Primary health units ..	number	2,800	3,000	3,442	3,900	5,000	5,000
(c) Family planning centres ..	number	2,136	2,557	3,005	4,500	8,200	8,200
2. Personnel							
(a) Medical colleges (intake) ..	number	5,800	7,100	7,280	9,219	8,000	11,500
(b) Doctors (*i*)	000 numbers	70·0	74·5	77·8	80·0	81·0	85·0
(c) Nurses (*i*)	000 numbers	27·0	29·4	32·2	35·2	45·0	45·0
(d) Auxiliary nurse-mid-wives and mid-wives (*i*)	000 numbers	19·9	22·5	25·4	30·0	48·5	48·5
(e) Nurse-dais and dais (*i*) ..	000 numbers	11·5	N.A.	N.A.	N.A	40·0	40·0
(f) Health assistants and sanitary inspectors (*i*)	000 numbers	6·0	8·2	11·1	N.A.	19·2	19·2
Housing (*j*)							
1. Subsidised industries housing scheme	number of houses	13,322	13,000	12,800	5,900	73,000	66,300
2. Low income group housing scheme..	number of houses	:,968	10,400	11,500	7,100	75,000	59,000
3. Slum clearance scheme	number of houses	13,882	9,000	15,700	20,900	100,000	88,100
4. Village housing projects	number of houses	4,512	6,000	3,700	6,800	125,000	66,500
Welfare of Backward Classes							
1. Tribal development blocks ..	number	43	70	119	224	450	450
2 .Post-matric scholarships	number of a wards in the year ..	48,778	57,190	53,914	62,500	350,000	313,000

(*a*) Refers to calendar year.
(*b*) By working on three shifts
(*c*) Relates to five years.
(*d*) An additional 0·5 million bicycles to be produced in small scale be sector.
(*e*) Another 150,000 would be produced in small-scale sector.
(*f*) For 300 HP and below.
(*g*) Revised to 55,000 tons.
(*h*) Revised to 4·5 million numbers.
(*i*) In practice or service.
(*j*) The figures given do not include the number of houses under construction.

CHAPTER IV

FINANCIAL RESOURCES FOR THE PLAN

THE Third Plan visualised an investment programme of the order of Rs. 6,300 crores by the public sector. In addition there was a provision of Rs. 1,200 crores for financing current outlays on the Plan. Thus the aggregate financial provision in respect of the public sector plan added up to Rs. 7,500 crores. The cost of the physical programmes included in the Plan was, however, larger. It was, therefore, stressed in the Plan that the resources position should be kept under review so that timely action could be taken to reduce the gap between requirements and resources in sight.

2. During the past two and a half years there have been several fresh developments which have an important bearing on the resources position. Firstly, because of the onset of the emergency and the threat to national security, it has been found necessary to step up defence outlays substantially. In addition, under other non-plan items also expenditures have turned out to be larger than the estimates visualised earlier. On the other hand, a redeeming feature has been a substantial improvement in normal tax receipts, partly in response to increased efficiency in tax administration. In the matter of additional taxation also the endeavour at the Centre from the very beginning has been to improve upon the plan target. In the States, while the start was rather slow a considerable amount of taxation has been put through in the last two years. This Chapter reviews the position in regard to resource mobilisation in the first three years and gives in the light of emerging trends a broad assessment in regard to the plan period as a whole.

3. *Financing of the Plan in the first three years.*—The following table indicates the financing of the plan outlays in the first two years together with the budget estimates for the current year.

Financing of the Plan—1961-62 to 1963-64

(Rs. crores)

	Five-year scheme of finance as visualised in the Plan			1961-62 Actuals			1962-63 Revised estimates			1963-64 Adjusted budget estimates		
	Centre†*	States	Total	Centre†*	States	Total	Centre†*	States	Total	Centre†*	States	Total
	1	2	3	4	5	6	7	8	9	10	11	12
1. Balance from current revenues ..	410	140	550	138	28	166	—94	42	—42	—433	30	—403
2. Additional taxation ..	1,100	610	1,710	86	15	101	186	51	237	471	122	593
3. Railways contribution*	100	—	100	45	—	45	14	—	14	13	—	13
4. Surpluses of other public enterprises	300	150	450	13	21	34	8	20	28	46+	31	77+
5. Market loans**	475	325	800	62	85	147	97	201	201	113	87	200
6. Small savings@	213	387	600	25	65	90	43	59	102	67	68	135
7. Unfunded debt	183	82	265	40	14	54	45	14	59	47	18	65
8. Steel Equalisation Fund	105	—	105	13	—	13	7	—	7	6	—	6
9. Balance of miscellaneous capital receipts over non-plan disbursements	428	—258	170	40	10	50	167	—3	164	276	—56	220
10. Total of Items 1 to 9	3,314	1,436	4,750	462	238	700	473	297	770	606	300	906

11. Budgetary receipts corresponding to external assistance**	2,200	—	2,200	262	—	262	437	—	437	507	—	507
12. Deficit financing**	524	26	550	152	16	168	239	—32	207	233@@	8	241
13. TOTAL OF ITEMS 10 to 12	6,038	1,462	7,500	876	254	1,130	1,149	265	1,414	1,346	308	1,654
14. Central assistance for State Plans	—2,375	2,375	—	—322+	322†	—	436@@	436††	—	—450@@	450	—
15. TOTAL RESOURCES—PLAN OUTLAY			7,500	554	576	1,130	713	701	1,414	896	758	1,654

*Excluding the amount raised by way of changes in fares and freights which is included under item 2.

@Including Prize bonds, Gold bonds and receipts from Compulsory Deposit Scheme.

+Excluding the amount raised by changes in postal rates credit for which has been taken under item 2.

†Central assistance in respect of 1961-62 plan adds up to Rs. 344 crores. Of this 322 crores was paid during that very financial year while the balance was paid in 1962-63.

††This is based on the data given in the State budgets and includes arrears in respect of 1961-62 paid in 1962-63.

@@In the Central budget provision was made for Central assistance of Rs. 400 crores only. The figure adopted here is Rs. 450 crores as subsequently it was decided to increase the amount by Rs. 50 crores. Correspondingly the figure of deficit financing has been increased.

**As defined in the Plan, receipts under market loans refer to net absorption of Government securities by the public. Correpondingly, deficit financing refers to changes in Government's indebtedness to the Reserve Bank. Receipts corresponding to external assistance include net receipts from foreign grants and loans as well as net accretion of rupee resources arising from P.L. 480 imports during the Third Plan period.

†*Includes Union Territories.

4. The plan outlay of Rs. 1,130 crores in 1961-62 was financed to the extent of Rs. 700 crores from normal resources, including borrowings, additional taxation and surpluses of public enterprises. Budgetary receipts corresponding to external assistance provided Rs. 262 crores. The remaining amount of Rs. 168 crores represented deficit financing. Tax receipts were fairly buoyant. Additional tax effort put forth at the Centre was substantial; in the States, however, only a modest beginning was made. While on the whole the financing of the Plan in this year did not lead to any strain on the economy, the resources position in certain States was difficult and led to overdrafts with the Reserve Bank.

5. On the basis of the revised estimates for 1962-63, for a plan of Rs. 1,414 crores, normal resources would come to Rs. 770 crores, external assistance Rs. 437 crores, and deficit financing Rs. 207 crores. While the precise position in regard to the actual outlay incurred and its financing is not available at this stage, the data regarding utilisation of external assistance and deficit financing show that the actual receipts under both these items were lower. Under external assistance, against the revised estimate of Rs. 437 crores the rupee resources that became available for the plan amounted to Rs. 336 crores. Deficit financing was lower at Rs. 171 crores. In regard to normal resources, however, the final position was definitely better than that shown by the revised estimates. For example, while on the basis of the revised estimates, the 'balance from current revenues' for the year would work out at Rs. (—) 42 crores, the actual was a positive contribution of Rs. 90 crores or so. Similarly the yield from additional taxation was higher than the figures as per revised estimates. On the whole, it would appear that actual plan outlay in 1962-63 was somewhat lower than the revised estimate of Rs. 1,414 crores.

6. The estimates of States' resources for 1962-63 include an amount of Rs. 35 crores representing the gain to the States from the Third Finance Commission's Award. In spite of this gain and the tax effort put in during the year by most of the States, the ways and means position of certain States continued to be difficult and the Centre had to give further *ad hoc* loans in this year to these States to clear their overdrafts with the Reserve Bank.

7. Consequent upon the declaration of the emergency in October 1962 the defence budget for the year 1962-63 had to be augmented from the budget figure of Rs. 376 crores to Rs. 505 crores. In the current year (1963-64), the budgetary provision for defence is substantially higher, being Rs. 867 crores. In addition, the provision for plan outlay has also been increased from Rs. 1,414 crores in 1962-63 (R.E.) to Rs. 1,654 crores in the current year. For financing the additional requirements of defence and development, the Centre had to come forward with a large taxation programme. The taxation effort by the States this year has also been significant. It is estimated that the taxation measures undertaken

by the Centre and the States in 1963-64 would yield about Rs. 330 crores this year and Rs. 1,075 crores over the plan period. Thus a little over half of the increase in defence and plan expenditure is sought to be covered by additional taxation.

8. After allowing for receipts from existing taxes, market borrowing, small savings etc. and external assistance, the budgets for the current year involve a deficit of Rs. 241 crores. It is difficult to predict at this stage the likely outcome over the year as a whole. The data regarding actual receipts in 1962-63 under principal Central taxes suggest that tax receipts in 1963-64 may be higher than the estimates shown in the Central budget. Accordingly, it is not unlikely that the deficit for the year may be lower than the figure of Rs. 241 crores worked out at this stage.

9. Each of the items set out in the Table in para 3 is discussed below.

10. *Balance from Current Revenues.*—An important fact that emerges from the review of the resources position during the first three years of the plan is that normal tax receipts, both at the Centre and in the States, have turned out to be more buoyant than estimated earlier. If present trends continue, total tax receipts over the plan period at 1960-61 rates of taxation would exceed the earlier estimate by about Rs. 800 crores. By the end of the current plan period, the proportion of normal tax receipts to national income would be about 10 per cent as compared to 9·6 per cent in 1960-61.* This is in contrast to the trends in the decade 1950-51 to 1960-61, when the proportion of tax revenues to national income, without reckoning additional taxation, declined from 6·6 per cent to 6 per cent.

11. Concurrently with the improvement in normal tax receipts, non-plan expenditures have also turned out to be substantially higher than those visualised earlier mainly on account of increases in defence and other non-plan items. In the light of the trends in the first three years, it is estimated that the net outturn over the plan period under the item 'balance from current revenues' would, as compared to the plan estimate, show a sizeable deterioration.

12. *Additional Taxation.*—In the Plan, the five-year target of additional taxation to be undertaken at the Centre was indicated at Rs. 1,100 crores. The measures implemented in the first year yielded a little over Rs. 85 crores in that year; the yield over the plan period may amount to roughly, Rs. 510 crores. In the second year again the tax effort was of a substantial order, the yield over the plan period from the measures introduced in that

*If account is taken of the additional tax effort that has been put through in the first three years, the proportion of total tax receipts to national income in the last year of the Plan (1965-66) should be over 13 per cent as compared to 11·4 per cent indicated in the Third Plan.

year would be roughly Rs. 500 crores. The aggregate yield over the plan period from the current year's measures, including changes in railway freights and fares and postal rates, may be roughly Rs. 900 crores. On this basis the aggregate yield over the plan period from the taxation measures introduced so far at the Centre may come to a little over Rs. 1,900 crores.

13. For the States, the five-year target of additional taxation was indicated in the Plan at Rs. 610 crores. Measures taken by the States in the first three years would yield over the plan period on aggregate revenue of about Rs. 425 crores. If account is also taken of the resources that will accrue to the States from the changes in the inter-State sales tax rates carried out in the current year, the additional taxation over the plan period in the States would come to Rs. 500 crores. Thus, the effort so far put forth in the States has been below the target visualised in the Plan. Within this over-all picture, the position, however, differs considerably from State to State.

14. Taking both the Centre and the States together, the measures of additional taxation undertaken so far would yield over the plan period roughly Rs. 2,400 crores *i.e.,* about Rs. 700 crores more than the target. This improvement would, however, be more than offset by the deterioration under the item 'balance from current revenues' referred to in para 11 above.

15. *Contribution of Railways.*—The five-year estimate of railways' contribution for the Plan, excluding the resources to be raised from changes in freights and fares, was indicated in the Plan at Rs. 100 crores. As against this, the contribution in the first year amounted to Rs. 45 crores. For the year 1962-63, the revised estimate, excluding the resources raised by way of changes in freights and fares, works out to Rs. 14 crores. The actual position, however, was somewhat better. The decline in the second year as compared to 1961-62 was because of an increase in working expenses consequent upon the revision of pay scales. For the year 1963-64, the corresponding budget estimate of the contribution of railways is Rs. 13 crores. The actual outturn in the current year also may be better. On a rough basis, the estimate of railways' contribution towards the financing of the Plan over the first three years may be taken at Rs. 80-90 crores. This is exclusive of the resources realised from changes in freights and fares which have been reckoned under the item 'additional taxation'. In view of the performance in the first three years, it appears that the normal contribution of the railways over the five-year period would exceed the Plan estimate of Rs. 100 crores by Rs. 40-50 crores.

16. *Surpluses of other public enterprises.*—One of the principal objectives of India's plans is to expand the activities of the public sector in the field of basic industries and services. The expansion of the public sector in industry, transport, power and the like pre-supposes that a part

of the resources required for such expansion would be forthcoming from the surpluses of the enterprises already established. It was for this reason that the Third Plan had laid emphasis on surpluses of public enterprises as a source of finance for the Plan. It was assumed that the public sector steel plants, fertiliser plants, oil refineries, other industrial enterprises, power projects, State transport undertakings and the like would yield a surplus over the plan period of Rs. 450 crores for financing their own expansion. Of this, Rs. 300 crores was in respect of the enterprises under the Centre and the remaining Rs. 150 crores was expected to be realised from State undertakings.

17. Since most of the public sector enterprises which were in existence at the end of the Second Plan were new, it was assumed that the depreciation provision to be made by them would also be available for financing expansion during the Third Plan period. The estimate of the surpluses to be realised for the Plan from public enterprises was thus inclusive of the amount likely to be available from depreciation provision. It was further emphasised that the estimate of Rs. 450 crores referred to above was tentative as the data on which it was based were not sufficiently firm.

18. Over the first three years of the Plan, the Posts and Telegraphs Department has made a net contribution to reserve funds (which are part of the Central budget) of about Rs. 30 crores.* So far as other Central enterprises are concerned, the expansion programme in the first two years had to be financed almost entirely from budgetary allocations.† The major projects such as steel plants and the fertiliser plants which had expansion programmes were not able, during this period, to realise any surpluses to finance this expansion on account of the delay in achieving full capacity output. For the current year it is hoped that, with the progress made in realising full capacity output in a number of public sector projects, a surplus of Rs. 37 crores would be available. Taking all the Central Government enterprises, including the Posts and Telegraphs Department, their contribution to the Plan in the first three years is expected to be of the order of Rs. 70-80 crores. Even allowing for some improvement over the last two years of the Plan, it is clear that the target of Rs. 300 crores for the contribution of Central enterprises would not be reached.

19. So far as the enterprises within the purview of the States are concerned, their contribution in the first three years would come approximately to Rs. 75 crores. A major part of this contribution relates

*This is exclusive of a sum of Rs. 5 crores representing additional resources raised through changes in postal rates.

†During 1961-62, the latest year for which data are now available, Central enterprises were able to earn a surplus of Rs. 29 crores. This amount is, however, not reckoned as surplus available for the Plan as it arose with enterprises which had no expansion programme or was utilised for financing requirements not included in the Plan.

to State electricity undertakings. On the whole, the net contribution of State enterprises over the plan period would reach close to the target of Rs. 150 crores.

20. The experience of the past few years would suggest that continuing attention needs to be devoted to the efficiency and the pricing policy of public sector enterprises so that their expansion could be undertaken increasingly on a self-sustaining basis.

21. *Market Loans.*—The Third Plan takes credit for market borrowings over the plan period of Rs. 800 crores—Rs. 475 crores in respect of the Centre and Rs. 325 crores on behalf of the States and State enterprises. In view of the experience in the Second Plan when a significant part of the market floatations had to be subscribed by the Reserve Bank, it was emphasised in the Third Plan that the estimate of Rs. 800 crores under 'market loans' was intended to refer to net absorptions of Government securities by the public *i.e.,* by agencies other than the Reserve Bank.

22. In 1961-62 net borrowings of the Centre and the States including State Electricity Boards came to Rs. 150 crores, Rs. 65 crores at the Centre and Rs. 85 crores in the States. The net absorptions of Government securities, both long-term and short-term, by the public during the year was also of the same order, namely, Rs. 147 crores.

23. The response to market borrowing in 1962-63 showed significant improvement over the preceding year. The net amount raised by way of market loans amounted to Rs. 201 crores—Rs. 97 crores at the Centre and Rs. 104 crores by the States including State Electricity Boards. As in the preceding year, the net absorption of Government securities by the public at Rs. 198 crores was of the same order as net market floatations. In part, the improvement in the performance of market loans during the year is explained by the spontaneous response of the people to the National Defence Bonds issued after the onset of the emergency. Subscriptions to these bonds during the year amounted to Rs. 23 crores. Considering the decline in receipts under small savings and the subdued tone of the capital market in the latter part of the year, it is reasonable to infer that the performance of market borrowings during the year was somewhat unusual in the sense that it reflected extraordinary circumstances in the wake of the emergency rather than a normal upsurge in the savings potential of the economy.

24. In the current year the budget estimate of net borrowings is Rs. 200 crores. So far, the net amount raised falls short of this figure. Some of the State Electricity Boards have yet to go to the market. Altogether, total market borrowing during the first three years should amount to Rs. 525-550 crores.

25. Of the aggregate net floatations of the order of Rs. 525-550 crores in the first three years, the amount representing the borrowings of the States, including Electricity Boards, would come to roughly Rs. 275 crores *i.e.,* 85 per cent of what they were expected to raise over the plan period as a whole. Thus the States have been drawing on the market at a rate much faster than that visualised in the Plan. The position, however, differs considerably from State to State. In view of the relative imbalance between different States and the Centre's need for resources it will be necessary to regulate the borrowing programme of the States in the coming two years.

26. Prospects for market borrowing during the remaining two years of the Plan would depend on the growth of production and savings in the aggregate and on the level of private investment. While the growth of production and savings might be expected to show an improvement over the trend in the first two years, market borrowing by the public sector must also take into account the requirements of the private sector. Even so, considering that nearly two-thirds of the plan target in this respect has already been realised over the first three years, it would not be unreasonable to assume that market borrowing during the plan period as a whole would exceed somewhat the original estimate of Rs. 800 crores.

27. *Small savings, Prize Bonds and other related items.*—The Third Plan target of small savings is Rs. 600 crores. In 1960-61, net collections reached a record level of Rs. 108 crores. It was in the light of this performance that the target for the five-year period was taken at a figure which was 50 per cent higher than the total realised over the Second Plan period.

28. In 1961-62, net collections amounted to Rs. 87 crores, a decline of Rs. 21 crores over the previous year's level. In 1962-63, in spite of all the efforts, the declining trend continued, the net receipts being Rs. 80 crores.

29. For the current year, the budget estimate of net collections under small savings is Rs. 105 crores. In addition, the Central Budget takes credit for collections under compulsory savings of the order of Rs. 25 crores. In view of the changes in the Compulsory Deposit Schemes, he yield at the Centre would now be lower. So far as the States are concerned, they had not taken credit in their budgets for receipts from compulsory deposits. It is hoped that every endeavour would be made to step up collections under small savings so that the resources that would have otherwise been raised through the Compulsory Deposit Schemes are realised by way of small savings collections.

30. The trend of small savings in the first five months of the current year has been fairly encouraging; the net realisations in this period have amounted to Rs. 35 crores as compared to Rs. 15 crores in the corresponding period of the last year. This trend suggests that the collections in the

current year would be substantially higher than the average for the first two years.

31. Over the first three years of the Plan, the aggregate collections under small savings, prize bonds and related schemes may come to about Rs. 300 crores. This means that if the plan target is to be realised, the collections in the last two years of the Plan have to be of about the same order as realised in the first three years.

32. *Unfunded Debt.*—In regard to provident funds and other items of unfunded debt, the five-year estimate visualised in the Plan was Rs. 265 crores, Rs. 183 crores in respect of the Centre and the remaining Rs. 82 crores for the States. The realisation in the first year came to Rs. 54 crores and in the second year Rs. 59 crores. In the current year it is likely to go up to Rs. 65 crores. On the basis of these trends, the five-year estimate would now work out at a figure of about Rs. 50 crores higher than the estimate indicated in the Plan. Part of the improvement is due to the fact that the receipts in 1961-62 itself turned out to be higher than the base figure assumed in the Plan. The extension of provident fund schemes to all Government employees at the Centre on a compulsory basis and adjustments of similar type carried out in a number of States have also led to an improvement under this item.

33. *Steel Equalisation Fund.*—For this item, the five-year estimate was indicated in the Plan at Rs. 105 crores. On account of upward revisions of retention prices and the delay in realising the increases in steel output as originally planned, the actual realisation under this item over the plan period would be substantially smaller.

34. *Balance of miscellaneous capital receipts over non-plan disbursements.*—The Plan estimate of the five-year out-turn under this item is Rs. 170 crores, Rs. 428 crores at the Centre and Rs. (—) 258 crores in the States. In the first year, net receipts amounted to Rs. 50 crores. For the second year the revised estimate is Rs. 164 crores. The actual was perhaps lower; it may be roughly placed at Rs. 100 crores. The improvement in 1962-63 over the preceding year was mainly due to contributions of the order of Rs. 48 crores to the National Defence Fund. For the current year, the budget estimate is Rs. 220 crores; the actual may well be lower; as a rough guess one may take it at about the same level as the estimate for 1962-63. In the light of these trends it appears that over the five-year period, the net out-turn under this item would show an improvement over the estimate visualised in the Plan.

35. *External Assistance.*—In the Plan the five year estimate of budgetary receipts against external assistance other than PL 480 was indicated at Rs. 1,800 crores. As against this, the total for the first two years is Rs. 421

crores and the budget estimate for the current year is Rs. 362 crores. The utilisation of external assistance in the coming years can be speeded up considerably. On the whole, therefore, given further commitments of assistance on the scale indicated in the next Chapter, it is not unlikely that budgetary receipts corresponding to external assistance (other than P.L. 480) should amount to Rs. 1,800 crores as envisaged in the Plan, or perhaps even more.

36. In regard to P.L. 480, it is assumed that over the Third Plan period funds generated through imports would be about Rs. 725 crores. Allowing for retention and expenditure by the U.S. Government and investment in stocks, the resources corresponding to PL 480 imports for financing the Plan would come to about Rs. 500 crores* as against the earlier estimate of Rs. 400 crores.

37. *Deficit Financing.*—In 1961-62, deficit financing amounted to Rs. 168 crores. Rs. 152 crores on account of the operations at the Centre and Rs. 16 crores in the States. For the second year the corresponding estimate works out at Rs. 171 crores. Thus in the first two years of the Plan the aggregate resources raised by way of deficit financing came to Rs. 339 crores. The budget for the current year involves a deficit of Rs. 241 crores. The actual deficit as discussed earlier, may turn out to be lower. As for the remaining years of the Plan, the scope for budgetary deficits will naturally have to be judged in the light of emerging circumstances.

38. *The overall position.*—The general picture regarding internal resources for the Plan that emerges from the preceding review may now be summarised. In view of the step up in defence outlays and inevitable increases under other non-plan expenditures, the 'balance from current revenues' over the five-year period may be substantially lower than the estimates visualised in the Plan. This is so despite a significant improvement in normal tax receipts. The additional taxation undertaken so far, particularly at the Centre, has been considerable; the resources likely to be realised over the plan period should exceed the plan estimate. This excess will, however, cover only a part of the shortfall under 'balance from current revenues'. In the case of 'miscellaneous capital receipts', the five-year estimate may show an improvement over the one indicated in the Plan but under 'surpluses of public enterprises other than railways' and 'steel equalisation fund', there will, in all probability, be substantial shortfalls. So far as market loans and provident funds are concerned, the actual realisation over the plan period is likely to be somewhat better. Railways'

*This is exclusive of the amount that would become available out of accumulated funds of P.L. 480 transferred from the State Bank to Reserve Bank for re-lending to Government. These receipts are in the nature of deficit financing as they do not represent any fresh flow of resources from abroad but merely re-lending of funds generated out of imports in an earlier period.

contribution should also turn out to be higher. On the assumption that external assistance on the scale required would be forthcoming, that every effort would be made to realise the plan estimate in respect of small savings, and that it would be possible to avoid further significant increases in non-plan expenditures, the overall resources position for the five-year period should, on present indications, show a marginal improvement over the estimate indicated in the Plan.

39. While the overall position in regard to resources is thus satisfactory, there are certain States which have been experiencing difficulties in raising resources on the scale postulated in the Plan. Additional taxation undertaken in these States has been lower than the targets visualised earlier. In respect of small savings and regulation of non-plan loans and other expenditures also, the assumptions made in the Plan have not fully materialised. The result is that these States have faced ways and means difficulties in the first two years. In some of these States it would be difficult to implement the original plans in full without further steps to strengthen their financial position.

CHAPTER V

FOREIGN TRADE AND PAYMENTS

ASSUMPTION IN THE PLAN

THE estimates of the balance of payments over the Third Five Year Plan as indicated in the Plan document may be seen from Table 1.

TABLE 1

Balance of payments estimates for the Third Plan as indicated in the Third Plan document

(Rs. crores)

	Total Third Plan	1961-62
A. *Receipts*		
1. Exports	3,700	667
2. Invisibles (net) (excluding official donations)	Nil	22
3. Capital transactions (net) (excluding receipts of official loans and private foreign investment)	—550	—133
4. External assistance	2,600	575*
5. Draft on foreign exchange reserves	Nil	Nil
TOTAL 1 to 5†	5,750	1,131
B. *Payments*		
1. Imports of machinery and equipment for Plan projects	1,900	325
2. Components, intermediate products etc. for raising production of capital goods	200	60
3. Maintenance imports	3,650	746
TOTAL 1 to 3†	57,50	1,131

2. Export earnings during the Third Plan period were taken at Rs. 3,700 crores. No net payments from invisible transactions (excluding official donations) were anticipated over the plan period, the receipts in the early years of the Plan being offset by payments during the remaining years. In respect of capital transactions (excluding receipts of official loans and private foreign investment), a net outflow of Rs. 550 crores was estimated over the five-year period. India's capacity to finance imports during the Third Plan period out of her own earnings thus came to Rs. 3,150 crores.

3. A provision of Rs. 3,650 crores was made for imports of raw materials, intermediate products, etc. required for the maintenance of the

†P.L. 480 imports are excluded from both sides—about Rs. 600 crores for the Third Plan period.

*Represents external assistance required for financing imports as shown below.

economy. It was, however, stated that the actual requirements of maintenance imports were larger and that an estimate of Rs. 3,800 crores for such imports could not be considered to be too high. A further provision of Rs. 200 crores was made in the Plan for imports of components, intermediate products, etc. for raising the output of machinery and equipment in the country. As for the imports of machinery and equipment required for the projects included in the Plan, it was stated that payments for such imports during the Plan period would be limited to a total of Rs. 1,900 crores, although the actual requirements of such imports were about Rs. 2,030 crores, *i.e.,* Rs. 130 crores higher. Total payments for imports of various categories (excluding imports under PL 480) thus came to Rs. 5,750 crores.

4. The gap between total import payments during the plan period and the capacity of the country to pay for such imports out of its own earnings was thus of the order of Rs. 2,600 crores—Rs. 1,900 crores for imports of capital goods and machinery required for Plan projects and Rs. 700 crores for non-project imports and re-financing external debt.

THE OUT-TURN OF THE BALANCE OF PAYMENTS IN 1961-62 AND 1962-63

5. Table 2 shows the out-turn of the balance of payments in 1961-62 and 1962-63.

TABLE 2*

Balance of payments in 1961-62 *and* 1962-63

(Rs. crores)

	1961-62 (Actuals)	1962-63 (Likely actuals)
1. Imports (c.i.f.)		
(*a*) Commercial*	916	973
(*b*) P.L. 480*	88	123
TOTAL IMPORTS	1,004	1,096
2. Exports and re-exports (f.o.b.)	667	682
3. Visible trade balance	—337	—414
4. Invisibles (excluding official donations)	—12	—10
5. Current balance (excluding official donations)	—349	—424

*The figures in this table are based on Exchange Control data.

**Includes that portion of P.L. 480 freight charges (50 per cent) which is financed out of India's own resources.

	1961-62 (Actuals)	1962-63 (Likely actuals)
6. Capital transactions		
(*a*) private foreign investment (gross inflow excluding retained earnings)	22	26
(*b*) repayments of loans to IBRD	—14	—16
(*c*) repurchase of rupees from the IMF	—61	—
(*d*) other capital transactions (net)*** including errors and omissions	—54	—42
TOTAL CAPITAL TRANSACTIONS (NET)	—107	—32
7. Deficit covered by foreign aid/use of reserves	—456	—456
8. Financed by:—		
(*i*) I.M.F. drawings	119	12
(*ii*) P.L. 480 aid	88	123
(*iii*) Disbursement of other foreign assistance	243	319
(*iv*) Use of foreign exchange reserves (including Government balances abroad)	6	2

6. *The overall position.*—Actual export earnings in 1961-62 at Rs. 667 crores were the same as those estimated in the Plan document. On the other hand, there was a net outflow of Rs. 12 crores in respect of 'invisible' transactions (excluding official donations) in that year as compared to a net inflow of Rs. 22 crores assumed in the Plan. The outflow on capital account (excluding official loans and private foreign investment) amounted to Rs. 129 crores which was close to the Plan estimate of Rs. 133 crores. Total payments for imports, excluding imports under the P.L. 480 programme, in 1961-62 amounted to Rs. 916 crores, which was Rs. 215 crores less than the figure of Rs. 1,131 crores shown in the Plan document. Disbursements of external assistance (including Rs. 22 crores of private foreign investment) on the other hand, amounted to only Rs. 265 crores as against a figure of Rs. 575 crores shown in the Plan document. Of the gap of Rs. 125 crores between import payments in 1961-62 and the availability of foreign exchange resources including external assistance, Rs. 119 crores ($ 250 million) was met by gross borrowings from the I.M.F. and the remainder Rs. 6 crores—by drawals on the country's foreign exchange reserves. The inadequacy of non-project assistance and the deterioration on account of invisible transactions were the main factors responsible for the strain on the balance of payments in that year.

7. There was heavy pressure on the foreign exchange reserves during the first quarter of 1962-63, and this necessitated the imposition of further restrictions on imports in the beginning of June 1962. One of the factors responsible for the decline in invisible receipts in recent years had been the prevalence of unauthorised transactions, particularly gold smuggling and foreign travel by persons who had not been granted foreign exchange for

***Includes utilisation of the West German credit for Rourkela Steel Plant (DM 600 (million)

this purpose. In order to check these losses of foreign exchange, stricter control was imposed on foreign travel on June 8, 1962. Furthermore, India entered into a standby agreement with the I.M.F. for a credit of $ 100 million, of which a sum of $ 25 million (Rs. 12 crores) was drawn in July 1962. During the second half of 1962-63, a number of measures were taken to discourage the smuggling of gold and other banned articles.

8. The position in regard to the foreign exchange reserves improved after June 1962. As against a loss of Rs. 56·07 crores in foreign exchange reserves, including Government balances held abroad, in April-June 1962, the reserves improved by Rs. 53·86 crores during the last three quarters of 1962-63. Over the year as a whole, the foreign exchange reserves of the country thus recorded a decline of Rs. 2·21 crores. In addition, drawings from the Fund during the year amounted to Rs. 12 crores as already indicated. Gross drawings from the Fund in 1962-63 were thus substantially smaller than in 1961-62. But it should be noted that whereas there was a repayment of Rs. 60·7 crores to the I.M.F. in 1961-62, there were no such repayments in 1962-63.

9. The improvement in the payments position in 1962-63 as compared to the previous year was the outcome of a number of factors, including the remedial measures indicated above. Furthermore, export earnings in 1962-63 at Rs. 682 crores were Rs. 15 crores higher than in the previous year.

While the outflow on account of invisibles was about the same as in 1961-62, the outflow on capital transactions (excluding official loans and private foreign investment) amounted to Rs. 58 crores as against Rs. 129 crores in 1961-62. The utilisation of external assistance (including private foreign investment) was also Rs. 80 crores higher than in 1961-62. Altogether, the improvement in the payments position made it possible to finance a larger aggregate import bill in 1962-63 as compared to the preceding year.

10. *Exports**.—Actual exports (including re-exports) amounted to Rs. 660·6 crores in 1961-62. As compared to actual exports of Rs. 642·8 crores in 1960-61, the export performance in 1961-62 thus showed an improvement of Rs. 17.8 crores. Exports of a number of commodities recorded increases in 1961-62 as compared to 1960-61 (see Table 3). Notable among these were sugar, jute manufactures, raw cotton, coir yarn and manufactures, art silk fabrics and oil cakes. However, the gains made in these commodities were partly offset by lower earnings from commodities such as, cotton textiles, manganese ore, vegetable oils (non-essential) and tea.

*The figures of exports indicated in paragraphs 10 and 11 and in Table 3 are based on Customs returns. On the basis of Exchange Control data, however, actual exports amounted to Rs. 667 crores in 1961-62 and Rs. 682 crores in 1962-63 as indicated earlier.

TABLE 3*

Exports of certain major commodities in 1960-61, 1961-62 *and* 1962-63

(Rs. crores)

	1960-61	1961-62	1962-63	Increase (+) Decrease (—) in 1961-62 over 1960-61	Increase (+) Decrease (—) in 1962-63 Over 1961-62
1. Tea	123·6	122·3	129·2	—1·3	+6·9
2. Coffee	7·2	9·0	7·6	+1·8	—1·4
3. Spices	16·6	17·5	13·9	+0·9	—3·6
4. Tobacco	15·7	15·0	18·9	—0·7	+3·9
5. Vegetable oils (non-essential)	8·5	5·8	13·2	—2·7	+7·4
6. Oil cakes	14·3	17·3	31·8	+3·0	+14·5
7. Sugar (excluding molasses) ..	2·5	14·6	17·0	+12·1	+2·4
8. Cashew kernels	18·9	18·2	19·4	—0·7	+1.2
9. Raw cotton	8·7	14·3	12·2	+5·6	—2·1
10. Leather (tanned and dressed)	24·9	25·3	22·6	+0·4	—2·7
11. Jute manufactures	135·2	144·8	155·7	+9·6	+10·9
12. Cotton textiles	57·5	48·3	46·5	—9·2	—1·8
13. Art Silk fabrics	3·2	6·7	8·1	+3·5	+1·4
14. Woollen manufactures ..	5·6	4·7	5·2	—0·9	+0·5
15. Coir yarn and manufactures	8·7	11·4	12·2	+2·7	+0·8
16. Iron Ore	17·0	17·4	19·8	+0·4	+2·4
17. Manganese ore	14·0	10·4	7·9	—3·6	—2·5
18. New Manufactures .. .	25·3	23·6	17·1	—1·7	—6·5
TOTAL (INCLUDING OTHER EXPORTS)	632·9	655·2	686·4	+22·3	31·2
Re-exports	9·9	5·4	7·3	—4·5	—1·9
All-exports	642·8	660·6	693·7	+17·8	+33·1

11. Exports in 1962-63, improved further by Rs. 33·1 crores to Rs. 693·7 crores. A number of commodities recorded large increases in exports in 1962-63 as compared to 1961-62. These were oil cakes (Rs. 14.5 crores), jute manufactures (Rs. 10.9 crores), vebetable oils (non-essential) (Rs. 7·4 crores) and tea (Rs. 6·9 crores).

12. A number of export promotion measures were taken during the years 1961-62 and 1962-63. The institutional framework for promoting exports was strengthened. A new Department of International Trade was established in the Ministry of Commerce and Industry early in 1962. This was followed by the constitution of a high level Board of Trade in May, 1962 to review all aspects of trade and commerce and to advise Government among other things on export promotion. A Freight Investigation Bureau was set up in the Directorate General of Shipping, Bombay. A Quality Control and Pre-shipment Council was also constituted with the objective of raising standards of all products exported from the country.

*The figures in this table are exclusive of exports from Goa.

13. Fiscal incentives were extended to a number of export items during this period. Thus the export duty on tea was reduced from 53 nP. per Kg. to 44 nP. per Kg. with effect from March 1961. This duty was reduced further to 25 nP. per Kg. under the Central budget for 1962-63. In general, the Central budgets in recent years, including the budget for 1962-63, have been directed towards restricting internal consumption of a number of export commodities. Moreover, while the budget increased the rate of tax on Indian companies from 45 per cent to 50 per cent, earnings from exports were excluded from this increase. The budget proposals also contained, for the first time, a specific allocation of Rs. 1 crore as Government aid for export promotion.

14. In 1961-62, the Government took steps for the stabilisation of the prices of two export commodities, *viz.* jute and lac. Fresh export quotas and enhanced quotas were also announced in respect of several commodities in that year.

15. The foregoing review has shown that export earnings increased moderately in 1961-62 and 1962-63. Exports over the two years totalled Rs. 1,354 crores (excluding exports from Goa) or an average of Rs. 677 crores a year. Export earnings were helped, to some extent, by increases in the unit prices of some commodities, such as, jute manufactures in 1961-62. On the other hand, a number of commodities recorded consistent increases in the quantum of exports over the two years 1961-62 and 1962-63. These were tea, oil cakes, sugar, jute manufactures, art silk fabrics and iron ore.

16. The Central budget for 1963-64 contains further measures for the promotion of exports. It makes a provision of Rs. 3 crores for developing new markets abroad for exports, and includes several concessions for export industries, such as the continuation of the rebate of income tax and super-tax on profits earned from exports which were introduced in the 1962-63 budget, and a further rebate of income tax and super-tax up to 2 per cent of the value of such exports.

17. *External Assistance.*—At the commencement of the Third Plan, external assistance of the order of Rs. 703 crores was available by way of carry-over from the Second Plan. Of this, about Rs. 329 crores represented advance commitments of assistance, primarily by the U.S.S.R. and other East European countries, earmarked specifically for the Third Plan projects. At the Consortium meetings organised by the I.B.R.D. in June 1961 and July 1962 to consider India's requirements of assistance for the Third Plan, the members of the Consortium promised assistance of Rs. 1,126 crores ($ 2,365 millions) for the first two years of the Plan. In addition, assistance amounting to Rs. 20 crores was authorised by non-Consortium countries

and Rs. 16 crores in the form of grants by the U.S.A. and Canada outside the Consortium arrangement. Thus the total of external assistance authorised or promised for the Third Plan up to the end of March 1963 came to Rs. 1,865 crores. Of this total, an amount of Rs. 1,470 crores has been or is proposed to be allocated for project requirements and the remainder Rs. 395 crores for non-project purposes. The utilisation of assistance amounted to Rs. 250 crores during 1961-62 and Rs. 324 crores during 1962-63 or a total of Rs. 574 crores over the two years. Of this total, about Rs. 359 crores consisted of project assistance, the balance of Rs. 215 crores being non-project assistance. There was thus a balance of the order of Rs. 1,291 crores at the end of March 1963—Rs. 1,111 crores in the form of project assistance and Rs. 180 crores as non-project assistance.

18. In general, assistance was utilised fairly quickly, where it was not tied to specific projects, as in the case of the credit for the import of capital goods extended by the U.K. and West Germany in 1961-62. On the other hand, where the assistance was earmarked for specific projects, utilisation was in the nature of things relatively more tardy. Utilisation of project assistance is generally a slower process because of the time taken for the preparation of project reports, invitation of tenders, manufacture of equipment and its shipment. Moreover, the utilisation of assistance is governed by the physical progress of the project itself depending on such factors as acquisition of site, availability of power, transport, etc. A greater volume of non-project assistance particularly from the U.S.A. was utilised in 1962-63. The use of project assistance was also larger in 1962-63 as a result of the momentum gathered in the implementation of Plan projects.

Prospects for the Balance of Payments—1963-64 to 1965-66

19. *Export Earnings.*—An attempt has been made to estimate export earnings during the three years 1963-64 to 1965-66, in the light of two general factors. First, the production in 1965-66 of some of the major commodities entering into India's export trade is now expected to be lower than what was envisaged in the Third Plan document. Shortfalls in production are expected in the case of steel, tea, oilseeds and cotton. Present estimates, however, place the production of sugarcane (in terms of gur) at 11 million tons in 1965-66 as compared to 10 million tons as shown in the Third Plan. Secondly, owing to the emergency and the new demands created by the defence effort, exports of certain commodities like raw cotton, raw wool, leather, etc. may turn out to be lower than what was envisaged earlier. A further assumption made in estimating export earnings during this period is that the present policies and measures in regard to export promotion will be continued and that further steps will be adopted where appropriate.

20. On this basis, total export earnings (including exports from Goa) for 1963-64 are placed at Rs. 740 crores, rising to a little over Rs. 800 crores in 1965-66. Over the three years 1963-64 to 1965-66, export earnings (including exports from Goa) may thus total Rs. 2,300 crores or so. The more substantial increases in export earnings during these years are expected in respect of iron ore, new manufactures, tea, sugar, cotton textiles, vegetable oils (non-essential), cashew kernels, fish, coffee and fruits and vegetables (other than cashew). Including exports from Goa, total export earnings over the five years of the Third Plan may thus be expected to amount to about Rs. 3,700 crores—which is the same figure as that given in the Third Plan document. But the figure in the Plan, unlike the present estimate, was exclusive of exports from Goa.*

21. *Invisible and capital transactions.*—Compared to 1962-63, the net outflow on invisible transactions (excluding official donations) is expected to increase in the last three years of the Plan, mainly because of larger interest payments on Government account. The outflow on this account may be placed at Rs. 100 crores for the years 1963-64 to 1965-66. Present estimates indicate that the net outflow on account of capital transactions (excluding official loans and private foreign investment) would also rise progressively during these years, the total outflow being estimated at about Rs. 400 crores over this period. The increase in the capital outflow during these three years is accounted for mainly by larger repayments of capital on Government account and by repayments to the I.M.F.

22. *Non-project gap.*—From the estimated export earnings of Rs. 2,300 crores or so during 1963-64 to 1965-66, an amount of Rs. 500 crores will have to be found to meet the outflows on account of invisible and capital transactions, leaving a balance of Rs. 1,800 crores for financing imports. From this balance, provision must be made firstly, for imports required for the maintenance of the economy and, secondly, for payments that will fall due during this period for project imports against commitments out of free resources entered into up to the end of March 1963. These latter payments are estimated at Rs. 100 crores during these three years.

23. The requirements of non-project imports (including imports of components, intermediate products, etc.) are expected to increase substantially during the years 1963-64 to 1965-66 mainly because of two general factors. First, the growth of production during this period of a number of commodities having a bearing on the country's import requirements is likely to be lower than was originally envisaged. Secondly, owing to a number of factors including the increased activity associated with the defence effort, the demand in the economy for a number of commodities is expected

*In the present estimate, actual exports from Goa in 1961-62 and 1962-63 together with expected earnings for the three years 1963-64 to 1965-66 come to about Rs. 90 crores.

to be higher than before. In broad terms, the requirements of non-project imports during these three years may be placed at an average of Rs. 800 crores a year or at Rs. 2,400 crores for the three years taken together.

24. There is, thus, a gap between available foreign exchange resources (excluding external assistance) and the payments in respect of the two items mentioned above of the order of Rs. 700 crores, which can only be met by disbursements of non-project external assistance. As seen earlier, an amount of Rs. 180 crores of non-project assistance was available for disbursement at the end of March 1963. While non-project assistance will doubtless be utilised far more quickly than project assistance, it would still be reasonable to assume that a certain amount of non-project assistance would spill over to the Fourth Plan out of fresh authorisations of non-project assistance during 1963-64 to 1964-65. Allowing for this spillover of assistance, additional commitments of non-project assistance required during 1963-64 to 1965-66 may amount to about Rs. 650 crores.

25. As a result of the meetings of the Consortium held in June, July and August 1963, the members of the Consortium pledged a total assistance of Rs. 501 crores ($ 1,052 million) for the year 1963-64. In the communique following the meeting held on August 7, it was stated that about two-fifths of the total aid pledged, *i.e.,* about Rs. 200 crores would probably be in the form of non-project assistance. If this expectation is realised, the balance of Rs. 301 crores may be taken to be the amount that would be available for project imports.

26. Taking credit for this amount of Rs. 200 crores of non-project assistance for the year 1963-64, this means that the additional commitments of non-project assistance (including re-financing of debt) required during the two years 1964-65 and 1965-66 would come to Rs. 450 crores. It is now generally recognised that non-project assistance has a crucial role to play at the present stage of development in the country. It is only on the basis of adequate availability of components and spares as well as materials for the growing industrial base of the country that full benefits could be realised from the capacity already created. What is more, given the practice of tying the use of aid to purchases from the aid-giving country, the freedom to use available assistance for projects or for other requirements. which non-project assistance makes possible, leads to a more efficient and economical use of the aid available. To a certain extent, the tying of aid to purchases from the aid-giving countries also makes it necessary to finance a part of the requirements of projects from our own export earnings as it is difficult to obtain economically all the requirements of a given project from a single source. And this, in turn, requires that a part of the over-all aid should be available for financing non-project needs. Apart from these general considerations, the need for non-project assistance at the present juncture in India also arises from the fact that we have had to finance in

the past a part of our developmental requirements from short-terms credits (including I.M.F. drawings) which are due for repayment over the next few years.

27. *Foreign Exchange requirements of Plan projects.*—Since the formulation of the Third Plan, the foreign exchange requirements for project imports have been revised upwards, partly because of rises in prices which have raised costs in most of the fields and partly because of the enlargement of the scope of some Plan programmes as well as the inclusion of new projects in the Plan, particularly in the transport and power fields, in order to provide a more adequate base for the implementation of the Plan as a whole. It has also become clear that since development is a continuing process and since projects, particularly in the basic sectors, have a fairly long gestation period, advance action must be taken even during the current plan period on a number of projects which would form essentially a part of the Fourth Plan. It is only on the basis of such advance action that a smooth transition to the next plan period could be provided and the kind of hiatus that had developed during the early years of the Third Plan could be avoided. On the other hand, a number of projects were included originally in the Third Plan without detailed project reports. It is not unlikely that on a closer examination it may be necessary to rephase some of these projects. Even so, the total foreign exchange commitments to be entered into during the Third Plan period for projects and programmes in the public and private sectors would be considerably larger than the sum of Rs. 2,030 crores mentioned in the Plan. Actual payments that would materialise during the plan period, however, would be significantly smaller so that, given the availability of external assistance to enter into commitments on the scale required, the carry-over of assistance from the Third Plan to the Fourth Plan would be much larger than the amount available for a similar carry-over from the Second to the Third Plan. With the growing momentum of investment, particularly in the sectors with a long gestation period, and given the need for advance action on an adequate scale in a continuing programme of development it is desirable that the pipeline of commitments at any given point of time should be reasonably full.

28. As against the total project commitments to be entered into during the Third Plan as a whole, external assistance of Rs. 1,470 crores was already available for financing project requirements at the end of the second year of the Plan. As already mentioned, an additional sum of approximately Rs. 301 crores is available for further project commitments from the assistance promised at the Consortium meetings held in the summer of 1963. Project commitments to the extent of Rs. 200 crores have also been undertaken on the basis of allocations from our export earnings. On a rough basis, private foreign investment should provide for project imports of another Rs. 150 crores or so. Altogether, therefore, foreign exchange finance for commitments of a little over Rs. 2,100 crores is already in sight.

As already mentioned, however, the total commitments to be entered into inclusive of advance action for the Fourth Plan would be considerably larger than this figure. In view of the already strained balance of payments and reserves position the additional commitments required for projects and programmes could be entered into only on the basis of additional project assistance being available.

29. The actual requirements of project assistance during the last two years of the Third Plan are being scrutinised in detail at present in connection with the next meeting of the Consortium which is expected to take place early in 1964. A more precise picture of the requirements and the availability will emerge only after the conclusion of this meeting. Apart from our requirements, the amount of additional project assistance that needs to be committed during any period depends also on the procedures of the aid giving countries and institutions. For example, since only a small part of the commitments to be entered into during the rest of plan period would materialise as actual payments during the current Plan, it would be possible to proceed with the projects that need to be taken in hand even without commitments of external assistance at this stage for covering their entire foreign exchange cost provided there is understanding regarding additional commitments of aid from time to time in accordance with the schedule of actual payments. The point that needs to be emphasised, however, is that the requirements of project assistance during the rest of the current plan period should be based essentially on an integrated view of the results that we seek to achieve over the next four or five wears.

30. It is necessary to emphasise that it is not prudent either for the public or the private sector to go on relying on foreign aid to the extent they have done so far. In fact, it was clearly stated at the time of the formulation of the Third Plan that the economy should reach a reasonable degree of self-reliance by the Fifth Plan. If this decision is going to be implemented, then we must ensure that the projects that we take in hand from now on are designed primarily to strengthen the balance of payments by increasing exports and replacing imports without at the same time involving an excessively large foreign exchange component. In this context, efficient and speedy implementation of whatever is taken in hand is as important as the observance of correct priorities in investment in the light of the basic objective of a self-reliant economy.

CHAPTER VI

EMPLOYMENT AND LABOUR POLICY

1. EMPLOYMENT

EVEN in the more advanced countries where the bulk of employment consists of wage or salary earners, it is difficult to have complete data on the quantum of employment. In our country where the greater portion of employment takes the form of self-employment rather than wage labour, it becomes even more difficult to get a complete statistical picture of employment changes in the economy.

2. In recent years, the Ministry of Labour have been developing a new source of information on employment. Thus, a programme of Employment Market Information has been started which gives the picture of employment by Employment Market areas, generally co-terminus with administrative districts. So far, data is available on the pattern and quantum of employment in respect of 227 Employment Market Areas. When the geographical coverage of the Employment Market Information programme is complete, it should be possible to build up a picture of additional employment in the organised sector based on direct sources. It is hoped that this will be achieved by the end of the Third Plan period. Meanwhile, attention may be drawn to the employment figures which are available on the basis of the returns made under the Compulsory Notification of Vacancies Act, 1959. According to this source, in the whole of the public sector and in establishments employing 25 or more persons in private sector, the increase in employment during 1961—63 has been of the order of 1·3 millions. Services account for about 40% of this increase, followed by manufacturing without 30% and transport and communications with 17%. The increase in services has taken place due to a general expansion in the administrative services, educational, medical and health services, etc. Important programmes of industrialisation implemented in the Second Plan and in the last two years explain the rise in 'manufacturing' employment. The development of railways, post and telegraphs, telephones, communications, road transport and shipping has been responsible for the sizeable increase in employment under "Transport and Communications".

3. The actual employment created is, of course, much larger as account has to be taken of wage paid employment in the smaller units and in the less organised sectors of the economy including small-scale industries and village industries, retail trade and other commercial establishments, agriculture, activities allied to agriculture, etc. In addition, there will be employ-

ment which is created in the form of additions to self-employment which would be found essentially in the unorganised sectors. It is obviously difficult to estimate the increase in employment in such sectors*.

4. An attempt has, however, been made on the lines followed in the Third Plan to assess additional employment generated as a result of Plan expenditure in the first two years. It is estimated that during this period the additional employment generated in the non-agricultural sectors is 3·2 millions. If account is taken of the expenditure budgeted for 1963-64, the estimated employment for the period 1961—64 would be about 5 millions, or about 47% of the target set for the entire period 1961—66. There has been some increase in agricultural employment, but it is difficult to make any estimate at this stage. The Plan target for additional agricultural employment is about 3·5 millions.

5. Taking a view of the additional employment to be generated during 1961—66, it does appear that in the first two years at any rate, employment has been somewhat below expectations. The position is expected to improve in the remaining period of the Plan with the growing fructification of investments and the gathering impact of additional defence expenditure. All the same, it appears that additional employment generated during the Third Plan period is likely to fall somewhat short of the original target of 14 millions.

6. The conclusion given above is reinforced by the increase in the number of persons on the live registers of employment exchanges which increased from 15·6 lakhs in March 1961 to 24·8 lakhs in March 1963. While it is true that the number of employment exchanges increased during the same period from 307 to 349, an analysis of the relevant data has shown that this does not make any significant difference to the reality of the increase in the number of persons seeking employment assistance. It must be added at the same time that the worsening of the employment situation is not likely to be to the extent indicated by the bare figures. This is because of the impact of the Compulsory Notification of Vacancies Act, 1959, as a result of which the employment exchanges are now more sought after for employment assistance than they were in the past. It is interesting to note in this connection that over the period March 1961 to March 1963, vacancies notified to the employment exchanges have increased from 5·7 lakhs to 8·3 lakhs and placements effected from 3·2 lakhs to 4·8 lakhs.

7. It also appears that the increase in unemployment is mainly attributable to new entrants in the labour force not obtaining employment. The

*For instance, in commercial establishments average wage employment is less than one per establishment. It really means that in a large number of these establishments there is no wage paid employment. In other words, these establishments give employment to their owners and dependents.

situation is particularly disquieting in respect of the educated classes. The total number of persons on the live registers, with qualifications matriculation and above, increased from 5·7 lakhs in June 1961 to 7·8 lakhs in June 1963. Side by side with this situation, manpower shortages are being experienced for professional and technical personnel such as engineers, draughtsmen, chemists, pharmacists, surgeons, physicians, trained teachers and certain categories of craftsmen including fitters, turners, tool-makers, electricians and the like. More attention needs to be paid to manpower planning and the relevant training programmes associated with it, if we are to make a sufficient dent on unemployment among new entrants to the labour force.

8. From the foregoing review, it would appear that while sizeable additional employment has been generated, significant increases are also taking place in the number of those seeking employment and are unable to find it. Apart from the developmental programmes included in the Plan, some special measures have been already initiated for dealing with the problem of unemployment, such as rural works programme, rural industrialisation programme, and special facilities, both technical and financial, for small-scale industries. The point has also been emphasised that labour-intensive methods should receive special attention in the implementation of Plan projects.

9. The employment problem would also become more easy to handle, if it is broken up and analysed by States and if State Governments would, in drawing up their projects for development, pay special attention to the employment aspect. The Commission is now engaged, in collaboration with State Governments, in making studies of the employment problem from the State angle and it is expected that when these studies are completed, some additional measures may be devised for increasing employment opportunities. The Commission is also organising more analytical studies of the employment and unemployment situation on the basis of the material available with the employment exchanges, EMI Units and other available relevant material. Among these may be mentioned district-wise analysis of employment statistics, analysis of the relation between employment exchange figures and the data collected by EMI Units, analysis with a view to getting more firm conclusions about the proportion of persons on the live registers already in employment, the effect of the efficiency of employment exchanges on the increase in the live registers, critical examination of shortage categories and the steps taken to meet them and analysis of the employment exchange data with a view to ascertaining the position of the backward classes both with respect of entry in the live registers as well as placements in employment. It is hoped that such analysis will help in a better understanding of the employment situation and will provide a better basis for the formulation of the Fourth Plan in regard to the employment problem.

2. Labour Policy and Programmes

10. *Industrial Relations.*—The emphasis in Labour Policy has continued on the promotion of cooperation between labour and management through collective bargaining, voluntary arbitration and 'Codes' like the 'Code of Discipline in Industry' and the 'Code of Conduct'. Following the emergency, Government convened in November 1962 a special meeting of employers and workers at which the Industrial Truce Resolution was adopted for the purpose of increasing production. The Indian Labour Conference, which is a tripartite body of workers, employers and Government, reviewed the industrial relations policy in July 1963 with specific reference to the Truce Resolution and expressed the opinion that in spite of some recent set-back, the policy pursued has generally worked well.

11. *Workers' participation in management.*—Joint Management Councils are functioning at present in 60 units—20 in the public sector and 40 in the private sector. Evaluation studies on the working of such Councils have shown that success has not been uniform, the determining factor being the understanding with which the parties concerned worked these Councils. However, Government have continued to exercise their influence in favour of extending the experiment to a larger number of units and also for their improved functioning. Two seminars were organised to acquaint employers and workers with the philosophy and technique of these Joint Management Councils. Progress in this field has been on the whole slow, and special efforts are called for to ensure that Joint Management Councils become a normal feature of our system of industrial relations. The successful working of such Councils will be an important step in our goal of widening the interest of workers in their work, and will provide a basis for improvement in productivity through a better understanding between the employer and his workers.

12. *Workers' Education.*—The workers' education programme continued to make progress. By the end of January 1963, 135 education officers, about 2,600 worker teachers and about 46,000 workers had received training under the Scheme. It is expected that this progress would continue and the Plan targets will be achieved.

13. *Wage Boards.*—Tripartite Wage Boards with their emphasis on unanimous recommendations have formed a unique feature of our wage policy. By the end of the Second Plan the process of voluntary implementation of the recommendations of the Wage Boards for cotton textiles, sugar and cement had already begun. Since March 1961, Wage Boards have been set up for plantation industries, jute, iron and steel, coal, iron ore and limestone and dolomite mining. The Wage Boards on plantation, coal, iron and steel industries have submitted their interim recommendations while the Jute Wage Board has submitted its final report. All these recommendations have been accepted by Government for voluntary implementation by

the parties. It is expected that this technique of settling wage disputes in determining wage levels will be extended to some other important industries during the remaining part of the plan period.

14. *Social Security.*—Since the beginning of the current Plan, the Employees' State Insurance Scheme was extended to 3·3 lakh workers, bringing the total number under its cover to 20 lakhs. Preparatory steps have been taken to extend the scheme to Ahmedabad and Calcutta and when these are completed, another 7 lakh workers would have been covered by the scheme. Attention needs to be drawn to the difficulties caused in the progress of the scheme by shortage of equipment, building materials and medical personnel.

15. The Employees' Provident Fund Scheme has been making rapid progress. In the current Plan it has been extended to 23 additional industries; the total membership now standing at a figure of 36·3 lakhs as against 29·3 lakhs in March, 1961. Membership of the Fund is likely to increase by another 3·7 lakhs and will reach a total of 40 lakhs by the end of the Third Plan. Apart from offering a measure of social security to the workers, the Scheme has proved its utility in mobilising small savings for economic development, as can be seen from the fact that the amount to its credit has increased from Rs. 274 crores in March 1961 to Rs. 430 crores in May 1963 and is expected to reach about Rs. 700 crores by the end of the Third Plan. The rate of contribution has now been raised from 6¼% to 8% in 4 industries, namely, electrical, mechanical and general engineering; iron and steel; paper and cement as also in coal mines. In 18 other industries the increased rate of contribution will be effective from November 1963. The extension of the enhanced rate to other industries is under consideration.

16. The shceme to provide a measure of relief and assistance to retrenched workers has not yet reached the stage of implementation. Another scheme for assistance to the physically handicapped, old persons unable to work and women and children without any means of livelihood is at present under discussion between the Central and State Governments. It is necessary that arrangements to offer assistance to these classes are made in right earnest, particularly because the former will provide a basis for a scheme of unemployment insurance and the latter may provide the necessary experience for working out a social assistance programme on a wider basis.

17. *Productivity.*—The Industrial Truce Resolution as indicated earlier has emphasised the need for increasing production. To help achieving the objective, Emergency Production Committee has been set up at the Centre with similar committees at the State level. Committees have also been established in individual factories. These committees deal with problems of production, productivity, absenteeism, reduction of costs, etc. So far 1,250 enterprises have established unit level committees. These committees

have had a favourable effect in creating the necessary climate for increasing production.

18. *Working Conditions.*—Provision of suitable working conditions continued to be secured through the strict enforcement of labour legislation, fresh emphasis having been placed on the greater obligation of public sector enterprises in this matter. A Committee has been constituted to draw up a scheme for the institution of National Safety Awards and to give suitable incentives to workers in establishments where absenteeism has recorded a significant fall.

19. *Vocational Training.*—Against a Plan target of opening 151 industrial training institutes, 144 have already been sanctioned. As regards additional capacity, 52,664 additional seats have been sanctioned against a target of 57,848 seats. To meet the requirements of craftsmen due to emergency, an accelerated training programme has been drawn up for training personnel who are already enrolled for defence. Training of motor drivers and wireless operators has already been speeded up. It must, however, be stated that a number of problems like shortage of equipment, instructional staff, unutilised capacity and inability of backward classes to fully utilise the training facilities offered to them, need close examination. With regard to instructional staff, however, four Central Training Institutes for Instructors have been added to the two existing at the end of the Second Plan. These institutes have been set up with substaintial assistance from international organisations and the U.S.A.I.D. As against the Plan target of training 8,500 instructors the first three years of the Plan will have under training 4,600.

20. *Other Schemes.*—The Apprentices Act was passed in 1961. The Act makes it obligatory on industry to admit specified number of trainees in approved trades. About 5,200 apprentices on a full time as well as short-term basis have been engaged under the Act so far against a Plan target of 10,000 apprentices. The skills for which apprentices have been enrolled are in the trades like, machine shop, foundary, metal working, electrical operations, building, machine maintenance, etc. As regards Employment Exchanges against a Plan target of opening 98 exchanges, 78 exchanges have been sanctioned. Other schemes continue to be implemented according to phased programme. The scheme of the Central Institute for Labour Research has, however, been making slow progress.

CHAPTER VII

ADMINISTRATION AND PLAN IMPLEMENTATION

THE critical role of measures to strengthen administration and ensure effective implementation of the Plan was stressed in the Report on the Third Five Year Plan. In sections of the Report concerned with different aspects of development, detailed proposals were made with a view to securing efficient execution. The Plan also outlined proposals relating to public enterprises, in particular for improvements in the planning of projects and their efficient organisation and management both in the construction and production phases.

In recent years a wide range of measures to strengthen administration have been taken or initiated, both at the Centre and in the States. Yet, in their practical aspects problems of implementation are still of formidable dimensions, and events since the beginning of the Third Plan have further emphasised the need for concentrated and sustained action towards the attainment of high levels of performance, better training of personnel, systematic reporting and evaluation and greater responsibility and initiative on the part of different agencies within the administrative structure. The need has also been felt for greater coordination between different agencies whose activities bear upon one another or are complementary in character, not only at the national or State level, but also within each region and area.

MACHINERY FOR ADMINISTRATIVE IMPROVEMENT

2. As visualised in the Draft Outline of the Third Plan, a high level Committee on Administration has been constituted within the Central Government. The senior officials serving on the Committee are expected to provide a degree of leadership from within the administrative structure, to give continuous attention to problems of efficiency in administration, to review action taken by the various Ministries and to propose from time to time further measures for raising the standards of administration. It was hoped that similar bodies would be constituted by State Governments. Since the commencement of the Third Plan, several States have taken concerted measures to increase administrative efficiency and to bring close study to bear on their administrative problems. In Maharashtra, implementation of instructions relating to organisation and methods is reported to a Standing Committee presided over by the Chief Minister. For over a year an Administration Reorganisation Committee has been engaged in a comprehensive review of the administrative machinery of the State with a view particularly to increasing its capacity for undertaking more extensive development programmes. A special work study unit is undertaking a series of detailed

investigations into the organisation and functioning of different departments in the State. In Madhya Pradesh, a committee of ministers was constituted for suggesting measures for achieving efficiency and economy. In a number of States, notably Andhra Pradesh, Assam, Gujarat, Madras, Madhya Pradesh, Mysore and Uttar Pradesh, Committees on Administration have been constituted with responsibility for locating administrative deficiencies and proposing measures for removing them. Incentive schemes have also been introduced in a number of States.

EFFICIENCY AND STANDARDS

3. In the immediate post-war period, extremely rapid expansion in the business of government had led to a degree of dilution in personnel and lowering of standards in the disposal of work. For several years, therefore, the major concern of organisation and methods units was to improve the general procedures followed in secretariat departments and executive agencies. New office manuals were drawn up and procedures laid out. Fore recently, special attention has been given to the training of lower grades of personnel. Since the beginning of the Third Plan, two significant developments at the Centre have been the decentralisation of the Central Secretariat Service and the introduction of a new scheme for financial and budgetary control which provides for enhanced delegation of powers to the Ministries. Considerable stress has also been laid by the Organisation and Methods Division of the Cabinet Secretariat and the Special Reorganisation Unit in the Ministry of Finance on work studies as a means of evolving improved methods and procedures. Work studies have been undertaken, for instance, for simplifying and rationalising procedures relating to foreign exchange sanctions for public sector projects, delegation of powers in river valley projects, indenting and inspection of stores procured through the Directorate General of Supplies and Disposals and house-keeping jobs common to various Ministries. Proposals for simplification of the Public Works Account Code have also been drawn up by a special working group set up by the Committee on Administration and a revised Code is to be introduced in the near future.

4. The question of evolving suitable measures for ensuring integrity in administration has been a matter of constant concern. In June 1962, the Ministry of Home Affairs appointed a Committee on Prevention of Corruption to examine and make recommendations concerning Vigilance Units in the Ministries of the Government of India, the Special Police Establishment, Government Servants' Conduct Rules and certain other administrative and legal aspects of the problems of securing a climate of integrity both among public servants and within the community. In the course of its work, the Committee has already made certain recommendations on which action has been initiated or is under consideration.

Training and Personnel

5. For some years it had been felt that in several technical fields State services alone could not attract sufficient talent of the highest quality and, consequently, development in these fields tended to suffer. For this reason and for securing greater national integration, in consultation with the States, it was agreed that All-India Services should be constituted for Engineering. Forest and Medical and Public Health. Accordingly, the All India Services Act, 1951, has been recently amended to provide for three new All-India Services—the Indian Service of Engineers (Irrigation, Power, Buildings and Roads), the Indian Forest Service and the Indian Medical and Health Service. Proposals for constituting an All-India Agricultural Service have been recently agreed to in principle at a conference of State Agriculture Ministers and are under consideration. A scheme for constituting an All-India Education Service is being considered. The Central Government has also constituted new Economic and Statistical Services and selections for appointment to the two Services at the initial constitution have been made by the Union Public Service Commission.

6. At the instance of the Planning Commission, Shri V. T. Krishnamachari undertook a study of the Indian Administrative Services with special reference to requirements over the next five years, methods of recruitment and training. The cadre of the Indian Administrative Service increased from 803 in 1948 to 2,252 in 1962 and is expected to rise to 2,400 by the end of the Third Plan period. The recommendation of the Second Pay Commission in favour of raising the age of superannuation for officers of the Indian Administrative Service to 58 has been accepted and orders have been issued in respect of the Central and the All-India Services. Following the Central Government's decision, many of the States have also raised the age of retirement to 58. Shri V. T. Krishnamachari's study of State Administrative services has shown that in some States sufficient attention was not being given to building up cadres and the requirements of personnel were frequently under-estimated. One of his main recommendations is that a minimum of 50 per cent of the posts in the State Administrative Services should be filled through competitive examinations held by Public Service Commissions and there should be regular annual examinations according to a carefully devised programme. States have also been urged to establish Training Institutes for State Services and to arrange refresher courses for them at appropriate stages in the service. Such institutions have been already established by a few States, such as Assam, Bihar, Gujarat, Mysore, Orissa and Uttar Pradesh. Officers of the State Services constitute the middle grade of the public service and they have a most important contribution to make to the efficiency and success of the entire machinery of Government. Another important recommendation made by Shri Krishnamachari concerns the need for continuing administrative and technical officers in their positions for long periods. At present, in many

cases, they are transferred frequently. This has adverse effects on efficiency. It is recommended that each State Government should carefully investigate the reasons for such transfers and take steps to make such adjustments in its administrative procedures as will reduce transfers to the absolute minimum.

7. In addition to Administrative personnel since the beginning of the Third Plan, some States have taken steps to strengthen their cadres in different technical fields, such as agriculture, cooperation, animal husbandry, fisheries, health and others. To an extent they have also improved the terms and conditions of service. However, in a number of States these are not yet adequate for attracting sufficient number of first and second class graduates into the public service. In this connection, it must be observed that both at the Centre and in the State much more attention should now be given to advance planning of personnel. As was stressed in the Third Plan, in each field of development, personnel requirements should be estimated carefully over a long period and the necessary preparatory measures should be taken sufficiently ahead of the actual requirements.

Reporting, Evaluation and Research

8. During the past two or three years, in a number of States steps have been taken to improve the system of reporting on Plan projects and schemes. Monthly progress reports on selected projects and quarterly progress reports on all schemes included in their plans are being obtained by the Departments concerned and subject to review by official committees and cabinet sub-committees. While arrangements for reporting within each State have improved, those relating to reporting as between the States and the Centre are not yet quite satisfactory. It is necessary to arrange for a special study of this aspect of the problem of Plan implementation, so that difficulties which the Planning Commission and the Central Government generally experience in obtaining information on progress from the States at regular intervals may be eliminated.

9. Since 1952, the Programme Evaluation Organisation of the Planning Commission has undertaken the evaluation of agriculture and community development programmes, and its stduies have been helpful in identifiying problems and difficulties. During the past three years, the Programme Evaluation Organisation has undertaken a number of intensive problem-oriented studies. These include evaluation of minor irrigation, soil conservation, multiplication and distribution of seed and the rural works programme. To provide guidance to the Programme Evaluation Organisation and to assist Central Ministries and State Governments in developing evaluation and arranging for training of personnel, an Evaluation Advisory Board has also been set up by the Planning Commission. Special study teams set up under the aegis of the Committee on Plan Projects have also undertaken a number of investigations. These include selected irrigation

projects, problems of industrial management, inventory control, construction costs and economies, minor irrigation and seed multiplication and distribution. While, from time to time, the Committee on Plan Projects may constitute study teams for investigating specific problems, its major concentration in future will be on management studies and reduction in construction costs.

10. An encouraging development in several States since the commencement of the Third Plan has been the establishment of evaluation units to which specific problems are remitted for study. Thus, in Maharashtra, an evaluation wing has been recently established in the Planning section of the Finance Department. The State Bureau of Economics and Statistics has carried out evaluation studies, on questions such as rural electrification programme, estimation of area under improved agricultural practices, distribution of fertilisers through cooperative societies and the working of the scheme for the free education of students from economically backward sections. In Andhra Pradesh, a State Evaluation Committee has drawn up reports on a number of Plan schemes including, for instance, consolidation of holdings, housing colonies for Harijans, State seed farms and the rural compost scheme. In the Punjab, the Economic and Statistical Organisation, which functions within the State Planning Department, has prepared evaluation reports on such subjects as the low income housing scheme, working of technical institutions, survey of improved agricultural practices in community development areas and the utilisation of loans advanced to small-scale industrial establishments. In Rajasthan there is a permanent evaluation organisation which undertakes, amongst others, a continuing study of the working of Panchayati Raj. In West Bengal and Madhya Pradesh also evaluation studies of selected projects have been undertaken. The Planning Action and Research Institute in Uttar Pradesh has also an extensive and continuing programme of studies. These recent developments in the field of evaluation will have considerable significance in the future, not only for the States concerned but also for other States and for national planning. It would be useful for each State to examine the results of studies undertaken by the Programme Evaluation Organisation and the Committee on Plan Projects and others in the light of their own experience and conditions and adapt such of the recommendations as might assist them in improving the working of their development programmes. On its part the Planning Commission will also endeavour to bring together the main findings of various agencies, including evaluation units in the States, and to make them more generally available.

11. In the formulation and implementation of policies and programmes for development, economic and social research has an increasing contribution to offer. Over the past decade, the Research Programmes Committee of the Planning Commission, which includes leading economists and social scientists, has determined significant areas of research and assisted studies and investigations by scholars associated with universities and research

institutions. So far about 170 research projects have been sponsored and 97 have been completed. For the period of the Third Plan, the Research Programmes Committee has indicated a number of topics requiring special study. These include macro-economic studies of the Indian economy, regional development, land reforms, rural development and co-operation, problems of social change and welfare, organisation and administration in relation to planned development and selected labour problems. As a further step in pursuance of the same general objective, with funds recently provided by the Ford Foundation, five leading research institutions in the country are being assisted in augmenting their research and teaching staffs with a view to undertaking research in basic problems relating to planning and development. The main topics on the basis of which specific programmes of work are being adopted by different institutions include studies relating to economic growth, financial resources, price policy, exports, agricultural and industrial development, utilisation of capacity, demand projections, productivity, investment and pricing policies of public enterprises and transport and power in relation to economic development.

Management of Public Enterprises

12. When the Third Plan was drawn up, there was considerable concern about the organisation and management of public enterprises and arrangements for the preparation of projects. Efforts have since been made to give effect to several of the recommendations in the Plan. The Ministry of Finance have already presented two annual reports on the financial aspects of Central Government undertakings. The proposal to constitute a Committee on Public Undertakings, to be elected from amongst members of the Lok Sabha, is at present under the consideration of Parliament. It is visualised that the functions of the Committee may include, amongst others, examination of the reports and accounts of specified public undertakings and examination, in the context of their autonomy and efficiency, whether they are being managed in accordance with sound business principles and commercial practices. The Hindustan Steel Limited has been reorganised and the powers of General Managers of individual plants have been considerably enhanced, the Board of Directors functioning as a policy making rather than as an operating body. A further step in the direction of autonomy and decentralisation has been recently taken in respect of the Durgapur Steel Plant and the Sindri Fertilizer Factory with the object of placing a large measure of operating authority at the plant level and minimising scrutiny by the Ministry of Steel and Heavy Industries and the Hindustan Steel Limited and the Fertiliser Corporation of India in day-to-day operation at the plants. With the greater experience which has been built up in recent years. Boards of Directors of public enterprises should now be better able to provide guidance and direction to matters of policy to the General Managers of individual industrial units. In various enterprises special attention has been given to training and personnel relations. Several enterprises have introduced incentive schemes for their own staffs.

There is also steadily increasing liaison between some of the public enterprises and the national laboratories.

13. Through public enterprises which have been established specially since the beginning of the Second Five Year Plan, considerable advance has been made in terms of skill, experience and organisation. However, the stage is yet far from being reached when it can be claimed that time-schedules, cost estimates, flow of benefits and returns on investment generally conform to the basic assumptions made when individual projects are approved. As far back as 1961, the Committee on Administration made a series of recommendations for strengthening arrangements pertaining to the preparation and management of projects. One of the main weaknesses observed in several enterprises is that the programme under implementation is not mapped out and scheduled in advance in sufficient detail. This has had two consequences. Firstly, because of inadequacies in the plan of operations, in the statement of requirements, and in specifying obligations on the part of various agencies, many of the assumptions made in a project are either not fulfilled or are fulfilled only after some delay or at greater cost. Secondly, reports on the progress of individual projects are not related to definite and clearly stated plans of operations. Therefore, they fail to provide a satisfactory measure of progress or to afford sufficient guidance in anticipating difficulties and finding solutions. Thus, some of the major problems of implementation of projects in the public sector fall within the area of *programming*, both physical and financial, and *reporting*. An important aspect of programming is the setting and achievement of time-schedules in the execution of a project. A study of the various aspects of programming would throw into relief many other problems, including those which arise within a project as well as those which involve the Ministries and other authorities.

14. With the object of evolving suitable systems for programming and for reporting on performance in projects of different kinds undertaken in the public sector, the Planning Commission is at present engaged in a study of fifteen selected projects. In these studies, which are being undertaken in cooperation with the managements of the projects, an attempt is being made to utilise and adapt some of the management planning and control techniques which have been developed in recent years. The projects under study are :

Industry—

Rourkela Steel Plant (Hindustan Steel Ltd.)
Heavy Electrical Plant, Bhopal
Machine Tool Plant, Pinjore (Hindustan Machine Tools)
Trombay Fertiliser Project (Fertiliser Corporation)
Hindustan Shipyard
Indian Telephone Industries.

Minerals—

Bisrampur Coal Mines Project (NCDC)
Kiriburu Iron Ore Project (NMDC)
Dugda Coal Washery (Hindustan Steel Ltd.)

Power—

Chandrapura Power Station (DVC)
Dhuvaran Power Project (State Electricity Board, Gujarat.)

Transport and Communications—

Shipping Corporation of India
Indian Airlines Corporation
Delhi Transport Undertaking
Railway Electrification—Calcutta-Asansol.

Projects in different fields have their own distinctive features and each individual project has its special problems. Nevertheless, it is hoped that the study will be of some help to the managements concerned in developing improved systems of planning and control in relation to their own projects and their experience may in turn, be of use to other projects of the Central and State Governments.

Planning Machinery and Procedures

15. In the Report on the Third Plan it was pointed out that large burdens were now being placed on planning organisations in the States and there was need to strengthen the existing arrangements and machinery for planning at the State level. While there must be a degree of flexibility in the arrangements which might be desired, States would need to equip themselves for undertaking the preparation of long-term plans in different fields of development, economic and technical investigations, and watching of progress in the implementation of policies and programmes. With the introduction of Panchayati Raj, it had become specially important that there should be integrated implementation and the institutions at the district and block level should be suitably assisted in carrying out the responsibilities entrusted to them. In improving the machinery for planning in the States, the aspects to be specially emphasised are reporting and evaluation, man-power planning, study of resources, arrangements for obtaining statistical information and systematic review of progress. The preparation of the Fourth Five Year Plan and the long-term plan up to 1975-76 in the period immediately ahead makes it essential for States to take early steps to equip their planning machinery for various tasks.

16. As aspect of Plan implementation which has presented some difficulty during the past two or three years relates to the working of arrangements for the financing of the plans of States. In a number of States adequate

measures have been taken for mobilising resources in accordance with the scheme of the Third Plan. However, in those States in which their own resources have fallen short, dependence on Central assistance (which forms parts of the scheme of finance for State plans) has been accentuated. Because of the limited resources available and large unsatisfied demands from the Departments, there has been constant pressure to shift funds as between different heads of development contrary to the scheme of allocations agreed for the Annual Plan. Such diversions have tended to cause setbacks in development in fields like agriculture and cooperation and certain social programmes of high priority have also been affected. In the working of State plans, a measure of flexibility is of course desirable. However, while providing for adjustments in outlays under different heads in accordance with the prescribed procedures, it is equally necessary that diversions of funds such as are likely to upset agreed national priorities should not take place.

17. When the Third Plan was being considered. State Governments indicated the areas and the regions which they regarded as being particularly backward. Allocations of resources for development in these areas were marked out, and in the subsequent Annual Plans efforts have been made to adhere to these special allocations. The Third Plan contemplated that more systematic surveys would be undertaken to identify the less developed areas in each State. To enable States to study the levels of development in different areas and to determine the areas calling for special development measures, a list of indicators of State and regional development was drawn up by the Planning Commission and communicated to State Governments. The data received are under study. A pilot survey of the economic problems of four districts in the eastern parts of Uttar Pradesh is being undertaken by the Planning Commission with the object of evolving a planned approach of the problems of less developed areas.

18. It was envisaged in the Third Plan that in the next phase of planning, as many towns and cities as possible and, at any rate, those with a population of 100,000 or more, should come into the scheme of planning in an organic way, each city mobilising its own resources and helping to create the conditions for a better life for its citizens. This is an important stage in the growth of national planning. By way of preparation, in August 1962, State Governments were asked to invite cities which have municipal corporations to draw up development plans (as part of the State plan). These plans were to comprise proposals for land acquisition and development, urban water supply, sanitation and drainage, housing (specially industrial housing and low-income housing), slum clearance and improvement and provision of sweepers' quarters, primary and secondary education, including vocational and technical training at the secondary level, medical and health facilities, adult literacy and education and development of rural areas falling within the municipal limits. Owing to the onset of the emergency the scheme could not be implemented with the Annual

Plan for 1963-64. It is hoped that State Governments will be able to embody development plans for at least a few selected cities in their Annual Plans for 1964-65 and 1965-66.

DISTRICT DEVELOPMENT ADMINISTRATION

19. At the suggestion of the Planning Commission, Shri V. T. Krishnamachari has studied problems relating to district administration arising from the introduction of democratic institutions at the district and block levels. In his report he has placed special stress on the preparation and implementation of village agricultural production plans, block development plans and district development plans. He has emphasised the need for the network of administrative and technical services in the States to continue to function as a well-knit structure at all levels, with duties clearly defined and enforced and an uninterrupted chain of responsibility in administrative and technical matters reaching down to the village level. The report also includes proposals for securing greater coordination between urban and rural development plans, both at the district and at the block level.

20. The expectation that integrated district and block plans might serve as an effective means for stimulating economic and social development has been so far realised only to a small extent. Nevertheless, useful experience has been gained and, with clearer determination in each State of the administrative processes and operations involved, more rapid progress can be realised in the future. In most States district schemes have been already marked out from States schemes. However, in the implementation of plans assigned to districts and blocks, there is need for much greater delegation of powers, both administrative and technical than exists at present. It is observed that there is a tendency on the part of each Department to implement its schemes under the Five Year Plans without affording sufficient opportunity for modifications to suit local conditions. Financial and administrative sanctions for schemes to be implemented in districts are frequently delayed. It is necessary that during the next two years or so, in every State, district and block plans should be made an effective component in the planning process; otherwise, even in the Fourth Plan, local plans will not have a significant role, and vast development possibilities will remain untapped. It has to be emphasised that the success of Panchayati Raj will turn almost wholly on the efficiency of planning and the quality of implementation at the district and block level. Similarly, village agricultural plans can be worked out most conveniently within the general frame of facilities provided through district and block plans.

21. In recent years, although sufficient success has not been achieved in the preparation and implementation of district and block plans, there is already considerable accumulated knowledge of the relevent problems. In most States, from time to time, instructions have been issued to departments and to local authorities. In Maharashtra, a scientific approach to

the survey of resources and the preparation of development plans is being made in the Wardha district with the asistance of the Gokhale Institute of Politics and Economics. While, at this stage, the broad direction is fairly clear and some of the essential administrative techniques have been established, there is both need and room for closer study. With the object of assimilating the experience thus far and identifying the problems, approach and methods of planning at the district, block and village levels, the Conference of State Ministers of Community Development and Panchayati Raj agreed in August 1963 that a Handbook on the preparation and implementation of district, block and village plans should be drawn up to serve as a general guide in the States. This task is to be undertaken jointly by the Planning Commission and the Ministry of Community Development and Cooperation.

REDUCTION OF CONSTRUCTION COSTS

22. Construction costs account for a substantial proportion of expenditure incurred in different fields of development. For this reason in the Report on the Third Plan special attention was given to measures which could be taken by Central Ministries and State Governments for securing economies in construction costs. Questions relating to cost reduction were investigated by the Buildings Projects Team of the Committee on Plan Projects. Various aspects of the subject were further considered in a Memorandum on 'Reduction in cost of major construction projects', which was drawn up by the Planning Commission in May 1962, and which offered suggestions amongst others concerning (a) planning, investigations, and preparation of project reports, (b) problems of implementation, including proposals regarding inventory control, choice of construction agencies, types of contracts, systems of payments, etc., (c) development and utilisation of highly trained manpower and (d) completion reports of projects and technical bulletins. The Planning Commission has proposed to Central Ministries and State Governments that the head of each major project should be given the assistance of a well-equipped cost reduction unit, whose main function would be to look out constantly for areas or specific points in respect of which appropriate action could result in reducing costs without impairing functional efficiency. The unit is intended to analyse continuously factors affecting costs, recommending suitable adjustments from time to time in respect of materials, techniques, sequence of construction, procedures and organisation, and evaluating and watching the progress of action towards achieving economy in construction costs. It has also been suggested that, both at the Centre and in the States, there should be high level technical committees for reduction of construction costs which could review, from time to time, action taken by different agencies in implementing proposals for effecting economies in construction and could formulate fresh recommendations in the light of experience and the results of research into methods of construction, materials and designs.

CHAPTER VIII

AGRICULTURE AND THE RURAL ECONOMY

1. AGRICULTURAL PRODUCTION

DURING the first two years of the Plan, there has been steady expansion in the total agricultural effort, and it has been a constant aim to identify and remove technical and administrative weaknesses in the execution of agricultural programmes. A great deal still remains to be done to achieve the necessary intensification of agricultural effort. Unfavourable weather conditions had markedly adverse effect on the volume of agricultural production in 1961-62 and 1962-63. In 1961-62, excessive rains during September-October affected the output of millets and cotton; later the cold wave in December-January caused serious damage to gram and other pulses. In 1962-63 rice production suffered on account of a prolonged drought, and inadequate winter rains diminished the out put of wheat, and other *rabi* crops. While seasonal factors have, no doubt, affected recent production levels, it is necessary to remember that over the past decade the general trend in the production of various crops has been upward and fluctuations from year to year have, on the whole, been relatively smaller than in earlier years. In agriculture increases in production are seldom realised uninterruptedly. It is to be hoped that with the prospects envisaged for the current year's crop the lag which have been recently observed may be overcome and a higher level of agricultural output reached.

2. The following table shows outlays on production programmes in agriculutre during the first three years of the Plan :

TABLE 1

Outlay on agricultural production

(Rs. crores)

Sub-head	Third Plan Provision	1961-62 (Actual)	1962-63 (Revised estimate)	1963-64 Plan	1961—64 Total	1961—64 As % of Col. (2)
1	2	3	4	5	6	7
Agricultural Production ..	226·1	21·9	31·6	45·1	98·6	43·7
Minor Irrigation ..	176·8	29·4	41·1	54·4	124·9	70·6
Soil Conservation ..	72·7	7·3	10·2	16·0	33·5	46·0
Cooperation	80·1	8·9	11·7	21·0	41·6	51·9
Community Development Agricultural Programmes (estimated)	126·0	16·4	15·5	19·2	51·1	40·8
Major & Medium Irrigation	599·3	92·0	102·0	99·0	293·0	48·8
TOTAL ..	1281·0	175·9	212·1	254·7	642·7	50·1

In addition, during the first two years of the Plan, short and medium term credit increased from Rs. 203 crores to about Rs. 267 crores and long-term credit (outstandings) from Rs. 38 crores to about Rs. 60 crores.

3. Over the Second Plan, the index number of agricultural production increased from 116.8 in 1955-56 to 139.6 in 1960-61. In 1961-62, the index rose to 141.4, being the highest recorded so far. However, in 1962-63, according to the provisional estimates at present available, the index fell to 136.8. The following table shows production of the principal crops during the first two years of the Plan, compared to performance over the Second Plan and estimates for the Third Plan.

TABLE 2

Progress of agricultural production

Commodity	Unit	1955-56	1960-61	1961-62	1962-63	1965-66 Third Plan Estimate
1	2	3	4	5	6	7
Production						
Rice	000 tons	27,106	33,658	34,257	31,512	45,000
Wheat	,,	8,630	10,818	11,849	10,956	15,000
Cereals	,,	54,941	67,239	68,310	66,041	83,000
Foodgrains ..	,,	65,816	79,691	79,741	77,507	100,000
Sugarcane (Gur)	,,	5,979	10,447	9,984	9,228	9,963
Cotton	000 bales	3,998	5,390	4,512	5,312	7,065
Oilseeds	000 tons	5,643	6,520	6,848	6,766	9,820
Jute	000 bales	4,198	3,982	6,347	5,367	6,181
Tobacco	000 tons	298	307	342	361	325
Tea	Million lbs.	628	708	781	759	900
Coffee	000 tons	34	67	45	52	80
Rubber	,,	22	25	26	31	45
Index numbers						
Foodgrains		115·3	135·6	137·5	131·3	171
Non-foodgrains		119·9	147·6	149·2	148·0	186
All commodities		116·8	139·6	141·4	136·8	176

PROGRESS OF AGRICULTURAL PROGRAMMES

4. The Third Plan had indicated targets under major agricultural programmes. State Governments have kept them in view in formulating annual

plans. The following statement brings together in summary form the available statistics of progress during the first two years under each head :

TABLE 3

Agricultural development programmes

Item	Unit	1960-61	Third Plan target	1961-62 (Actual)	1962-63 (Anticipated)	1963-64 (Projected)	1961—64 Additional/ net rise in level	1961—64 Col. 8 as % of Plan Target (Col. 4)
1	2	3	4	5	6	7	8	9
1. Irrigation (additional area benefited)								
Major & medium irrigation	Million acres	—	12·8	0·8	1·2	2·5	4·5	35·2
Minor irrigation	,,	—	12·8	1·8	2·1	3·0	6·9	53·9
2. Soil conservation and dry farming (additional area benefited)								
Soil conservation	,,	—	11·0	1·0	1·4	2·0	4·4	40·0
Dry farming	,,	—	22·0	1·9	3·0	5·5	10·4	47·3
3. Improved Seeds*	,,	55	203	67	81	101	46	31·1
4. Consumption of chemical fertilisers*								
Nitrogenous (N)	000 tons	200	1,000	280	350	450	250	31·3
Phosphatic (P_2O_5)	,,	70	400	72	80	160	90	27·3
Potassic K_2O)	,,	25	200	29	35	64	75	42·9
5. Organic and green manuring*								
Urban compost	Million tons	2·4	5·0	2·6	2·9	3·6	1·2	46·2
Rural compost	,,	66	150	75	83	109	43	51·2
Green manuring	Million acres	10·4	41·0	12·4	16·2	22·7	12·3	40·2
6. Plant protection*	,,	16	50	16	17	22	6	17·6

5. In view of the large gap between the current levels of production and those postulated for the Third Plan and the need to intensify agricultural programmes to the utmost in the context of the national emergency, high-level Central study teams comprising representatives of the Ministries of

*Level reached.

Food and Agriculture and Community Development and Cooperation and the Planning Commission, visited all States during April-June 1963 with the object of considering, in cooperation with State Governments, measures for strengthening the existing programmes for agricultural production. As a result of these consultations, weaknesses in the existing arrangements and in the programmes under implementation were identified and agreed proposals worked out for accelerating agricultural production. State Governments are taking steps to give effect to these proposals. Some additional assistance has also been provided by the Central Government.

6. *Minor Irrigation.*—The total additional area brought under minor irrigation schemes in the first two years of the Plan is estimated to be about 4 million acres. If the programme for bringing 3 million acres under minor irrigation in 1963-64 is fulfilled, 54 per cent of the target for the plan period will be realised. As a result of discussions between Central study teams and State Governments, it is hoped that in place of the Plan target of 12.8 million acres, State might find it possible to achieve 13.8 million acres. The Third Plan had indicated certain directions in which implementation of minor irrigation programme needed to be improved if full benefits by way of increase in agricultural production were to be obtained. These included strengthening of the technical and administrative organisation for minor irrigation, systematic surveys, better maintenance, adoption of appropriate crop pattern and better water management. Problems of utilisation of minor irrigation have been considered at a series of regional conferences in the light of the findings of the Committee on Plan Projects and the Programme Evaluation Organisation.

7. The strengthening of the technical and administrative organisation for minor irrigation works is important, specially for ensuring regular inspection and supervision, arranging supply of materials and undertaking surveys. Action along these lines has been taken in a number of States, but there are aspects calling for further attention.

Scarcity of key materials, specially cement and iron sheets, has affected minor irrigation programmes in the past. It has been proposed that specific quantities or proportions of the amounts of cement available might be earmarked by State Governments for agriculture, having due regard to the requirements of the programmes. As far as possible materials might be supplied in kind.

In recent years attention has been frequently drawn to loss of irrigation arising from inadequate maintenance of tanks and diversion works. Where works have been transferred to the management of village Panchayats or Panchayat Samities, it is necessary that there should be satisfactory financial arrangements to enable these bodies to provide for maintenance. It is also essential to specify the obligations of beneficiaries, both in relation to works

for which irrigation rates are levied and for works for which Panchayats or Panchayat Samities are responsible. In the event of failure on the part of beneficiaries to fulfil their obligations, these bodies should be empowered by law to undertake the works and recover the costs.

In connection with surveys of minor irrigation and the coordination of major, medium and minor irrigation schemes in each area, it has been suggested that district irrigation maps should be prepared. These should indicate areas which are being served or could be served in future by large and small irrigation schemes and by soil conservation schemes, works irrigating more than 100 acres being specifically marked on the maps.

8. In the utilisation of irrigation from large as well as small schemes, considerable delay occurs sometimes because of difficulties in obtaining land from non-beneficiaries. As far as possible, village Panchayats should arrange to secure the land needed for field channels, but this might not be always possible. It has, therefore, been proposed that community development funds could be drawn upon, if necessary, for assisting Panchayats in acquiring the lands of non-beneficiaries. To some extent it might be necessary for State Government to supplement community development funds available at the block level. In some parts of the country, considerable progress has been made in utilising electric power for lift irrigation schemes, wells and pumps. It is essential that in each district which has a programme of rural electrification under the Plan, there should be, at the same time, a well-coordinated programme for using electricity, specially for the development of minor irrigation.

9. Both in 1961-62 and 1962-63, the financial provisions proposed for minor irrigation at the time of the formulation of annual plans were subsequently augmented to some extent. As a result of examination by Central teams in consultation with the States, it is considered that minor irrigation is likely to call for increased outlay in part for additional programmes and in part for meeting requirements in certain States in which the existing financial provisions are not sufficient for fulfilling the targets agreed to for the Third Plan.

Effective implementation of minor irrigation programmes calls for a pooling of financial resources provided under different heads, and their utilisation in terms of carefully prepared development plans for each district and block. The first priority for the use of community development funds is now being given to the construction and maintenance of field channels. Instructions have also been issued that loans to individual cultivators should be made available, as far as possible, through co-operative agencies or by way of taccavi and community development funds should be used for schemes which benefit large numbers of persons jointly, whether these are undertaken by village Panchayats or by co-operative groups.

10. *Soil Conservation and dry farming.*—Except for Maharashtra and Gujarat, soil conservation programmes in other States have not so far come up to the levels envisaged in the Third Plan. Against 11 million acres of agricultural lands to be brought under soil conservation operations during the plan period, in the first two years about 2.5 million acres have been taken up. By the end of 1963-64 performance is expected to be a little less than 40 per cent of the plan targets. The three main aspects to be stressed are provision of trained personnel, systematic programmes for catchment and sub-catchment areas and forward planning accompanied by advance action.

In recent discussions with States a small increase in the target for the plan period from 11 to about 12 million acres is visualised. This will call for some additional outlays during the next two years. Apart from the necessary financial resources, it is necessary to stress the need in several States for strengthening the technical organisation for soil conservation. An aspect which has been brought out by the Programme Evaluation Organisations' recent study of soil conservation programmes is that in some States Agriculture Departments are not involving community development agencies in the planning and execution of soil conservation schemes. Only these agencies and their extension staff can undertake the difficult task of educating and mobilising cultivators at the block and village levels. It is also important that block development agencies should try to introduce suitable agronomic practices in areas where contour bunding and other soil conservation works are carried out.

Most of the States have enacted the necessary legislation for framing soil conservation schemes. There are, however, four States in which this has still to be done.

11. In a number of States there is considerable scope for extending dry farming practices. In the Third Plan the total area to be brought under dry farming operations was placed at about 22 million acres. More recently, in States like Andhra Pradesh, Gujarat, Madhya Pradesh, Punjab and Uttar Pradesh larger programmes have been proposed, the revised estimate for the plan period being 27 million acres. For the programme to be carried out fully, there is need for short training courses for cultivators and village level workers and extensive programmes of demonstrations on farmers' lands. The requisite implements are to be obtained through block budgets.

12. *Seed multiplication and distribution.*—In the course of the Second Plan nearly 3,600 seed farms were established. Of these, at the beginning of the Third Plan, nearly 90 per cent had reached the stage of producing improved seeds for further multiplication. The main task now is to ensure sound management practices in the seed farms and to work out well coordinated programmes in each area for multiplication and distribution of improved seeds of assured quality, accompanied by provision of credit and other facilities. This requires close collaboration between the agriculture and cooperative agencies.

The Third Plan envisaged an increase in the area under improved seeds from about 55 million acres to 203 million acres. From the available statistics it appears that the area under improved seeds increased by about 12 million acres in 1961-62 and by about 14 million acres in 1962-63. The programme for 1963-64 envisages an increase in area under improved seeds by nearly 20 million acres. Extension of area under improved seeds has to be seen as part of a comprehensive agricultural programme, and equal attention should be given to other aspects of the programme, specially adoption of improved agricultural practices and schemes for diversifying and improving the traditional crop patterns.

13. *Chemical Fertilisers.*—A major assumption in formulating the Third Plan programmes for agricultural production was that consumption of chemical fertilisers would be considerably stepped up. Consumption of nitrogenous fertilisers was to increase from 230,000 tons (nitrogen) in 1960-61 to 1 million tons in 1965-66, with corresponding increases for phosphatic fertilisers from 70,000 tons (P_2O_5) to 400,000 tons and for potassic fertilisers from 25,000 tons (K_2O) to 200,000 tons. These were high targets but mainly because supplies have been limited, the actual progress has been much less than was hoped for. Consumption of nitrogenous fertilisers in 1960-61 amounted to 193,000 tons (being 37,000 tons less than the Plan assumed) and increased to 280,000 tons in 1961-62 and to 350,000 tons in 1962-63. In 1963-64, it is expected to rise to 450,000 tons. While this rate of increase is considerable in comparison with the past, it still falls short of requirements. It is now reckoned that the total internal production at the end of the Plan may be of the order of 500,000 tons compared to 800,000 tons initially assumed. Although efforts are being made to provide larger amounts of foreign exchange for import of fertilisers, it is clear that the level of availability of nitrogenous fertilisers at the end of the plan period will fall short of the original targets. For the first three years of the Plan, the quantities imported have been 138,000, 245,000 and 223,000 tons of nitrogen. For the fourth year, imports are being increased to about 350,000 tons

14. During the first two years of the Plan, consumption of phosphatic fertilisers has shown only a small increase from 70,000 tons to 80,000 tons (P_2O_5). This is ascribed to two main reasons namely (a) in many areas cooperative agencies are not yet undertaking the distribution of phosphatic fertilisers and of mixtures on any scale, and (b) often cooperative credit does not become available to farmers for purchase of phosphatic fertilisers from private agencies. These two problems need to be looked into by State Governments.

Supplies of potassic fertilisers depend wholly on imports. Hitherto these were arranged for by the trade out of commercial allotments of foreign

exchange. It is now proposed to make a separate allocation of foreign exchange for import of potassic fertilisers.

15. Apart from the question of availability of fertilisers, recent discussions with State Governments, have drawn attention to certain deficiencies observed in the distribution of fertilisers through cooperatives. Cooperatives have the responsibility of ensuring timely supply, making credit available, reducing their costs of distribution and following sound and progressive business methods. Cooperative departments should exercise the necessary supervision and ensure that these conditions are fulfilled.

Some steps have been taken recently to promote use of fertilisers. These include reduction in the pool price of calcium ammonium nitrate, re-imbursement of transport charges for remote areas, arrangements for intermediate bulk storage, grant of off-season rebates and intensification of the programme for fertilisers demonstrations on cultivators' fields. Efforts are also being made to arrange for supply of fertiliser mixtures of approved standards.

16. *Organic and Green manures.*—In the Third Plan considerable emphasis was laid on the programme for organic manures and green manures. These programmes have become even more crucial in view of difficulties in securing adequate supply of chemical fertilisers. Special efforts should be made in each area to increase the output of urban and rural composts and extend green manuring practices.

17. At the end of the Second Plan the total quantity of urban compost produced by municipalities and the larger Panchayats had reached a level of about 2.4 million tons per annum. From the figures reported, it appears that production in 1961-62 and 1962-63 amounted to about 2.6 and 2.9 million tons respectively, as against the target of 5 million tons set for the Third Plan. Steps should be taken to intensify and enlarge the existing programmes for urban compost in each municipal area and large Panchayat. Deficiencies in organisation and distribution, transport facilities and provision of trained personnel need to be dealt with as a matter of high priority.

18. In view of the progress achieved in States like Andhra Pradesh, Madras, Orissa and Uttar Pradesh, the Third Plan proposed to bring an additional area of about 30 millon acres under green manuring. In the country as a whole, the additional area benefited by green manuring was about 2 million acres in 1961-62, less than 4 million acres in 1962-63 and only 6 to 7 million acres in 1963-64. Sufficient experience is now available for States, in which green manuring was hitherto not well established, to take up larger programmes.

19. In the Third Plan it was estimated that in 1965-66 the total volume of rural compost could reach the level of 150 million tons compared to

about 66 million tons at the end of the Second Plan. Statistical information in respect of rural composting is rough and not too dependable, but obviously extension agencies should put all the stress they can on this essential practice by arranging for demonstrations and providing guidance and training facilities for groups of cultivators in the villages.

20. In some areas cow-dung gas and manure plants have already become familiar and demand for them is slowly increasing. Under a scheme which is under examination, it is proposed that a few areas should be selected for planned extension of these plants supported by the necessary credit and service facilities.

21. *Plant Protection.*—In the course of the Plan plant protection measures were to be extended to 50 million acres compared to 16 million acres in 1960-61. In relation to needs this is a modest target. However, increase during the first two years of area served by plant protection measures has been only a little over one million acres. For 1963-64 a target of about 5 million acres is being aimed at. The Planning Commission and the Ministry of Food and Agriculture have recently completed a preliminary study of existing deficiencies in plant protection programmes. In part, the problem is one of supplies of insecticides, pesticides and equipment. Through systematic long-term programmes, rapid and continuous expansion of indigenous production can be achieved. To a limited extent imports are also essential. The production of manually-operated equipment has to be stepped up. The prevailing system of distribution of pesticides also calls for improvements. Cooperative agencies should be utilised for distributing supplies of pesticides and equipment, and arrangements for the cooperative use of the larger types of equipment should be made through Panchayats. Steps to strengthen the existing plant protection organisations are called for in several States. In the light of the study which has been undertaken further proposals for intensification of plant protection measures are being worked out. A number of States have enacted legislation relating to agricultural pests and diseases, but such egislation is not at present sufficiently effective. This aspect calls for further examination in the States. It should be added also that in developing plant protection programmes there is need for mobilising cultivators simultaneously over large compact areas in terms of well-planned campaigns.

22. *Improved agricultural implements.*—Over the past decade or more progress in the introduction of new implements and equipment has been generally slow. The importance of improved agricultural implements for scientific and technologically progressive agriculture was stressed in the Third Plan, which set out a number of specific proposals. During the recent consultation between the Central teams and the States it was observed that while the need for more rapid extension of improved technology was

generally recognised, the actual measures taken were still inadequate. Agricultural engineering sections of Agriculture Departments are often insufficiently equipped. A beginning has been made with the establishment of extension arrangements for demonstrating and popularising improved agricultural implements, specially at the district level. At the block level, generally, stocks of implements are now being maintained, but arrangements for demonstration and hire are not adequate. Provision of credit, both through cooperative agencies and by way of taccavi loans needs to be enlarged. It was proposed in the Third Plan that all extension training centres (numbering 100 in all) should be equipped with agricultural workshops for providing training facilities for village level workers, mechanics and artisans. However, as against 25 extension training centres at the end of the Second Plan, the number of extension training centres with workshops has gone up only to 31.

23. In several parts of the country, progressive farmers are adopting improved implements on an increasing scale. Their experience and example could assist in popularising the use of improved implements. To facilitate this, Agriculture and Cooperative Departments should evolve plans to ensure effective extension arrangements, training, credit and repair services.

Each intensive agricultural district is being equipped with an agricultural workshop at the district level. Along with the regional research, testing and training centres, these workshops should be utilised for producing improved proto-types for different regions in each State and for establishing standards.

24. Since the Third Plan began, the difficulties experienced earlier in supplying iron and steel for agricultural implements have considerably diminished, although there are still some categories of steel in which adequate supplies are not always available.

It has been proposed that State Governments should assess the requirements of iron and steel for agricultural purposes for three years at a time and to review their assessments from year to year. This would enable them as well as those engaged in fabricating implements to plan in advance. To expedite measures for manufacture, popularisation and training and to review progress periodically, the Ministry of Food and Agriculture have recently constituted a Board of Agricultural Implements and Machinery. In most States the principal implements to be popularised have been selected, but more systematic arrangements for their production and distribution are necessary.

Four regional research, testing and training centres for improved agricultural implements had been set up by the end of the Second Plan. Six more such centres are now being established.

25. It is proposed to give special attention to the manufacture of agricultural implements in rural industries projects. By placing orders in advance for improved implements and providing technical help, State Agricultural Departments can do much to assist establishment of cooperative manufacturing units in these areas.

26. *Intensive Agricultural District Programme.*—Under the intensive agricultural district programme, seven districts in Andhra Pradesh, Bihar, Madras, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh were taken up in 1960-61. These have received assistance from the Ford Foundation. Subsequently, intensive districts have been taken up in all other States, six since 1962-63 and three during 1963-64. One district in Himachal Pradesh is being developed with collaboration from West Germany. In view of the short period which has elapsed, data presently available relate to the first seven districts. The main emphasis in these districts has been on the introduction of a "package" of improved agricultural practices, specially application of fertilisers, introduction of improved seeds, plant protection measures, provision of credit and farm production plans for individual cultivators. In the first seven districts, out of a total of 140 development blocks, work has been taken up in 125. In the remaining districts, out of 169 blocks, work was taken up in 77 in 1962-63 and in 56 more during the current year. To a greater extent than other areas, intensive agricultural districts provide the necessary facilities for raising the technical level of agriculture, and experience gained in work in these districts should stimulate development elsewhere.

27. Intensive agricultural districts represent a new emphasis in the programme for agricultural development. A network of extension services having been established in most rural areas in the country, the idea of concentrating greater efforts where conditions of climate and irrigation are, on the whole, favourable is now being built into the general approach of community development and implementation through Panchayati Raj institutions. From the experience gained thus far, certain aspects of work in the intensive areas appear to call for much greater stress than they have received hitherto. These are :

(i) the need to draw village Panchayats and other Panchayati Raj institutions more effectively into the implementation of agricultural programmes,

(ii) preparation of village agricultural production plans as the indispensable framework within which the production plans of individual farmers can be implemented,

(iii) devoting special efforts to the strengthening of the cooperative structure along sound lines and expansion of the movement to include all families,

(iv) strengthening the programme for animal husbandry and dairying,

(v) evolving a broad crop plan for each area, which indicates the main directions of change and links up detailed agricultural programmes to the crop plan, and

(vi) undertaking additional programmes for general resources development of the area, *e.g.*, reclamation of land, village fuel plantations, soil conservation and dry farming, extension of irrigation, etc.

28. With the object of accelerating efforts for agricultural production, during 1962-63, 40 districts were marked for intensive development of rice and 76 districts for intensive development of millets. The organisation of work and the actual programmes to be carried out in these areas need close attention at the technical and administrative levels and the programmes drawn up should be followed up through systematic inspection and reporting.

29. *Commercial Crops.*—The production of cotton increased from 2.9 million bales in 1950-51 to 5.4 million bales in 1960-61. Over this period, the area under cotton rose from 14.5 to around 19 million acres. Thus, a considerable part of the rise in the output of cotton has been due to increase in area. Weather conditions in 1961-62 were distinctly unfavourable and production in 1962-63 was close to the 1960-61 level. Since current levels of production are much below the output indicated for the last year of the Third Plan, a series of measures have been initiated for stepping up production of cotton as a matter of urgency. These include—

(*i*) extension of cotton cultivation in newly irrigated areas,

(*ii*) improved supply of water for cotton in irrigated areas,

(*iii*) intensification of plant protection measures,

(*iv*) provision of special extension personnel for cotton, with greater emphasis on training,

(*v*) saturation of cotton areas with improved varieties of seed, and

(*vi*) increased supply of fertilisers.

For the intensive development of cotton, 15 blocks with a total area of 600,000 acres have been selected in the cotton producing States and additional intensive areas will be taken up from year to year.

30. A similar approach has been adopted for securing rapid increase in the production of oilseeds. In 1962-63, 7 blocks covering an area of about 1.4 lakh acres were selected for intensive work on groundnut, and in 1963-64, 23 additional blocks with an area of 4.6 lakh acres are being taken up. For sesamum and castor also, intensive work is being introduced in selected areas.

31. In respect of jute, with the object of increasing yield per acre and improving quality, a new scheme under which interest-free loans to the extent of Rs. 3 crores will be made available during the rest of the plan period for providing retting facilities has been recently prepared by the Central Government.

32. Special attention is being given to measures for intensive development of sugarcane in sugar factory areas in Uttar Pradesh, Bihar and Punjab. Plant protection measures are also being stepped up.

33. *Agricultural education and research.*—In the course of the Third Plan, the number of agricultural colleges was to be increased from 53 to 57 and the annual intake from 5,600 to 6,200. With the establishment of new private colleges, the number of agricultural colleges has reached 65, the total annual intake being nearly 7,500. There is greater need now to stress the importance of securing satisfactory teaching standards in a number of agricultural colleges. Agricultural universities have been established at Pantnagar (Uttar Pradesh), Ludhiana (Punjab), Udaipur (Rajasthan) and Bhubaneshwar (Orissa) and necessary legislation has been enacted in Madhya Pradesh and Mysore.

34. The Indian Council of Agricultural Research, Commodity Committees for cotton, oilseeds, jute, tobacco and other crops, and the Indian Agricultural Research Institute have a wide range of continuing research programmes which are being implemented as part of the Third Plan. Special efforts are now being made to establish new varieties and find solutions to problems at the regional level and to coordinate agronomic experiments with fertiliser trials and other lines of investigation. Considerable progress in evolving improved varieties of rice and wheat had been made before the Third Plan. More recently, research work on jowar, bajra and pulses has yielded useful practical results and a number of suitable hybrids for maize have been finally selected for large-scale production in different regions. A feature of recent agricultural research is the work being done at a number of centres on fruits, vegetables, tuber crops, grasses and medicinal plants. Work on cotton, oilseeds, jute, tobacco and spices has also been expanded. Research programmes on the control of pests and diseases have to be intensified further in view of the extensive damage suffered by crops. Extension workers and progressive farmers should be closely associated with the work at the research stations so as to ensure that results of research reach cultivators quickly and the practical problems faced by them received early attention on the part of research workers.

35. *Marketing and storage.*—The total number of regulated markets increased from 731 in 1960-61 to 1,023 in 1962-63. This leaves nearly 1,500 markets which have to be brought within the scheme of regulation. Three States have not yet enacted the necessary legislation. Regulation of marketing activities is a necessary condition for effective enforcement of floor prices

and for ensuring that the cultivator has a fair return for his produce. It has already been suggested that necessary legislation should be enacted at an early date by the States concerned and that the Central Government should work out, in consultation with each State, a definite schedule in accordance with which, in the course of the next two or three years, all the remaining markets will be regulated.

Compulsory grading under the Sea Customs Act has been extended to cardamom, black pepper and chillies, and a number of other commodities are also to be shortly brought within its purview.

The number of reporting centres under the Marketing Intelligence Service, which stood at 500 at the end of the Second Plan, has now increased to 1,100.

36. The Third Plan provided for increase in storage capacity from 2.5 million tons to 5 million tons, of which 3.5 million tons was to be owned by Government. By the end of 1962-63, the total storage capacity was 3.3 million tons of which storage owned by Government accounted for 1.8 million tons. The total storage with Central and State Warehousing Corporations has risen from 3.5 lakh tons to 6 lakh tons. The programme for provision of storage with cooperative societies, for which a target of 2 million tons was set for the Third Plan, is still lagging behind.

37. *Agricultural price policy.*—The importance of assured minimum remunerative prices for the principal cereals and cash crops was stressed in the Third Plan. Since the Plan began, steps have been taken to give effect to this general policy. Minimum support prices are now being fixed for rice, wheat, jowar, cotton and jute. For sugarcane, there has been for several years a minimum statutory price. In pursuance of the Government's price support policy, and with a view to building up, over a period of time, buffer stocks, to be used for moderating price fluctuations, purchase or procurement programmes are being undertaken in respect of jute, wheat and rice and are to be extended to cotton. Special emphasis is being laid on setting up a large number of purchase points in areas remote from roads and rail heads. With effect from the current season, a similar arrangement is envisaged for cotton. For sugar also, a proposal to create buffer stocks has been accepted in principle. In undertaking market operations and making arrangements for distribution, cooperative societies should have an increasing role and it is proposed to utilise them to the maximum extent possible.

38. *Agricultural administration and coordination for production.*—The Report on the Third Plan drew attention to delays which had occurred in several States in giving effect to the recommendations of the Agricultural Administration Committee. At a recent review of progress undertaken at a conference of State Agriculture Ministers it was observed that a few States

had still to take action to improve pay-scales and service conditions for agricultural personnel. This is a matter of considerable importance because, under existing conditions, in a number of States, Agriculture Departments are unable to attract persons of ability in sufficient number. In this connection, it may be mentioned that at a conference in August 1963, State Agriculture Ministers have recommended the constitution of an All-India Agricultural Service and this proposal is at present under consideration.

39. For some time concern has been felt that the efforts of various agencies at different levels in relation to agricultural production were not being effectively coordinated. Consequently, implementation of different programmes was being adversely affected. The aspects which are receiving special attention are the following :

(*i*) coordination at the State level, between the Agriculture, Cooperation and Irrigation departments and the Development Commissioner in charge of community development activities;

(*ii*) arrangements at the district level for ensuring efficient supervision and technical guidance for extension personnel in the blocks and an uninterrupted line of responsibility in technical matters from the State Agricultural Department down to the village level worker;

(*iii*) procedure for working out dovetailed and integrated plans of operation in each area between agriculture, cooperation, irrigation, community development agencies;

(*iv*) work load and scope of duties cast upon village level workers; and

(*v*) arrangements to assist block development agencies in bringing about the necessary concentration of efforts on agricultural production programmes.

40. Attempts have been made in different States to find remedies for these problems which are inherent in any scheme of integrated economic and social development. At the joint conference of State Ministers of Agriculture and Community Development and Panchayati Raj held in August 1963, a high level Working Group was set up for making proposals for coordination within the entire administrative and organisational structure from the village level to the State level. The proposals which have since been formulated by the Working Group are at present under consideration.

41. An Agricultural Production Committee of the Cabinet, presided over by Chief Minister and an Administrative Coordination Committee, presided over by Chief Secretary, have been set up by all State Governments with a view to reaching speedy decisions and implementing them expeditiously. These Committees have helped in coordinating programmes and reducing delays.

2. Forests

42. The Third Plan provides an outlay of Rs. 51 crores for various forest development programmes at the Centre and in the States, as against Rs. 19.3 crores during the Second Plan period. Besides expansion and intensification of the schemes initiated earlier, provision has been made in the Third Plan for new schemes for pre-investment survey of forest resources, plantation of fast-growing species, improved methods of logging and farm forestry. The progress of the principal forestry programmes during the first two years of the Plan is shown in the table below :

Table 4

Important Physical Targets and Achievements

Scheme	Unit	Third Plan target	1961-62 Achievement	1962-63 Anticipated achievement	Total 1961-63 (Col. 4 +5)
1	2	3	4	5	6
Fast-growing species ..	lakh acres	1·37	—	0·20	0·20
Economic plantations ..	,,	6·95	1·05	1·15	2·20
Farm forestry	,,	11·26	0·09	0·22	0·31
Rehabilitation of degraded forests	,,	5·08	0·87	0·82	1·69
Survey	000 square miles	46·0	2·31	11·00	13·31
Demarcation	000 miles	14·81	1·88	3·00	4·88

43. The total outlay on forestry schemes during the first three years of the Plan comes to about Rs. 22 crores. In view of the importance of preserving and developing forest resources for a variety of purposes, it is essential that greater attention is paid to these schemes during the remaining period of the Plan. Progress on farm forestry programmes has been somewhat slow. Panchayati Raj institutions should be helped to plant a large number of trees on village common lands, along village roads, contour bunds and irrigation tanks with a view to meeting the requirements of both timber as well as fuel. Efforts should be made to accelerate this programme by enlisting community effort and providing adequate supplies and services.

44. It is essential to develop the forest wealth of the country on a long-term basis not only for providing adequate fuel and timber for the rural areas but also for meeting the requirements of construction, and various industries including paper, rayon, plywood, matches and tanning. A project for pre-investment survey of forest resources for facilitating the formulation of a long-term programme for forest development on a comprehensive basis has been recently accepted by the U.N. Special Fund and will be soon put into execution.

3. Community Development and Panchayati Raj

45. Since the end of the Second Plan the number of development blocks to which the community development programme has been extended has risen from 3,100 to 5,183 thus covering almost the entire rural area of the country. At the end of June 1963, 305 development blocks had completed ten years of development, 1,452 blocks had completed the first-five-year period and entered the second stage, 2,766 blocks were still in their first stage, and in 659 blocks pre-extension works had been taken up.

46. *Emphasis on agriculture.*—During the past few years, in community development areas, increasing stress had been placed on agricultural development. It has been stressed that the principal test to be met by the community development movement is its practical effectiveness as an agricultural extension agency and its ability to mobilise the largest possible local effort for increasing agricultural production. To give effect to this general emphasis, certain steps have been taken since the beginning of the Third Plan. The provision for agriculture within the schematic budget of community development blocks has been increased. Instructions were given, specially after the onset of emergency in October 1962, that the village level workers should be assigned only one set of duties, namely, those pertaining to agricultural extension, supplies and demonstrations and assistance to cooperatives and Panchayats in drawing up and implementing village production plants. Funds provided for agriculture in community development areas are to be utilised for schemes benefiting large numbers of persons jointly; including specially, excavation and maintenance of field channels, village tanks and soil conservation. Responsibility for dry farming programmes has been specifically assigned to block development agencies. In areas taken up for intensive agricultural development, additional technical and other staffs are being provided as an integral part of the community development pattern of organisation. Efforts are also being made to secure more effective coordination within each district and block between the agriculture, cooperation, irrigation and community development agencies. As stated earlier, wider questions of coordination of action and policy on the part of various agencies at the State level have also been under examination. Similarly at the national level, arrangements have been made to achieve closer coordination between Ministries concerned with agriculture, cooperation, community development and irrigation.

47. The central problem in agricultural extension has been to evolve effective means for reaching both the village community and the individual farmer. Assistance and incentives for the individual farmer are of paramount importance, but unless cultivators in each village can function as a group through the village panchayat and the village cooperative, only a small proportion of the farmers can be drawn into the agricultural effort. For this reason considerable stress has been placed on village agricultural production

plans. Efforts to prepare and implement such plans have not yet succeeded in sufficient degree, although useful experience has been gained. The agricultural plan for a village has to provide for two groups of measures, namely, (*a*) tasks which the people themselves can carry out if suitably organised and helped, such as, minor irrigation, soil conservation and contour bunding, digging of field channels, village fuel plantations, utilisation of local manurial resources, etc., and (*b*) programmes for assisting individual cultivators by way of credit, supplies and technical guidance. To provide the facilities required for carrying out various programmes at the village level, it is essential that special attention should be given to the preparation of district and block agricultural plans. These would take account of the material and financial limits within which the total agricultural programme is being undertaken and serve as a framework within which cooperatives and Panchayats can lay out realistic plans of their own and utilise their local resources more fully. In the initial period, there are bound to be difficulties in giving concrete shape to this broad approach to which solutions have to be found through planned and purposeful experimentation and pooling of experience between different areas.

48. While the place of agriculture in economic development in rural areas cannot be too greatly emphasised, account has also to be taken of the fact that community development aims at the reconstruction of rural life, both in its economic and social aspects, and includes a variety of activities such as village industries, education, health and sanitation, and rural communications. In each of these fields there are vast and urgent problems. Moreover, in the last analysis, economic and social progress are closely related. While giving to agricultural the highest possible priority, Panchayati Raj institutions will also be necessarily concerned with other aspects of rural life. The issue, therefore, is one of devising appropriate machinery and organisation to enable Panchayati Raj institutions, and specially village Panchayats, to attend to social and welfare aspects of village development while leaving the village level worker wholly free for agricultural and allied activities.

49. *Panchayati Raj.*—Panchayati Raj legislation has been enacted so far in 12 States and Panchayat Samitis and Zila Parishads have been established in 10 States. By March 1962, 204,000 village Panchayats had been established, and these served about 95 per cent of the rural population. The successful working of Village Panchayats, Panchayat Samitis and Zila Parishads is of the utmost importance for the development of rural areas as well as from wider considerations. During the past two years, particular attention has been given to the administrative and functional aspects of Panchayati Raj. Problems relating to district administration and the preparation of district, block and village plans have been examined in a report by Shri V. T. Krishnamachari to which reference has been made earlier. To carry out the responsibilities entrusted to them, Panchayati Raj institutions at each level should be in a position to secure adequate resources both from

the State Government and at the local level. The recommendations of the Study Team on Panchayati Raj Finances which have recently become available are under consideration. Another Study Team has examined in detail the role and functions of the Gram Sabha in relation to the work of the Village Panchayat. Budgetary and accounting procedures pertaining to Panchayati Raj institutions have also been examined by a third Study Team. The establishment of Panchayati Raj has introduced a new and vital element in the structure of administration and in the machinery and processes of development and it will be necessary to keep under review such problems as may arise in the course of its practical working.

50. *Personnel and training.*—An important contribution of the community development programme has been to make available teams of trained workers for continuous service in rural areas, specially at the block and village level. In certain categories, for some years past, shortages have continued. For instance, in March 1963, there were shortages ranging between 26 and 30 per cent of the requirements among women village level workers and medical officers, social education organisers and progress assistants and of 5 to 6 per cent among agricultural and cooperation officers and village level workers. The effects of such shortages are sometimes further accentuated by transfers of personnel at short intervals. It is suggested that these aspects should be considered by the States concerned with a view to taking appropriate action at an early date.

51. Training facilities for personnel in community development blocks have been expanded in several directions. There are at present, among others, 98 training centres for village level workers and 46 for women village level workers, 13 training centres for extension officers for cooperation, 80 centres for training Panchayat secretaries and 66 centres for training members and officer-bearers of Panchayati Raj institutions at the block and village level.

52. *Village Volunteer Force.*—As a response to the national emergency, a scheme known as the Village Volunteer Force was introduced in January 1963. Under this, individuals in each village enrolled themselves as a Village Volunteer Force to carry out a threefold programme, namely, agricultural production, mass education and village defence. Considerable numbers of villagers have enlisted for these tasks. Offers of voluntary service up to 12 days in a year have also been recorded in the Defence Labour Bank in each village. It has been recently proposed that the Village Volunteer Force and the Defence Labour Bank should be merged into a single organisation to be described as the Village Volunteer Force and in utilising offers of voluntary service priority should be given to programmes for agricultural production.

53. *Programmes for weaker sections of the community.*—Panchayati Raj legislation which has been enacted provides for the representation of backward classes and weaker sections at various levels. In a number of States,

Panchayati Raj institutions have set up special committees to look after the interests of weaker sections. Schemes for the resettlement of landless agricultural workers and the rural works programme, which are of considerable importance to the weaker sections, are mentioned later in this chapter. The local works programme is being directed specially towards the provision of drinking water in the villages. There is considerable scope for accelerating programmes for subsidiary industries, such as poultry and piggery in community development areas.

54. The Gramdan movement has considerable significance for the weaker sections in the village community. The Planning Commission had circulated model legislation for the Gramdan areas to the State Governments. So far, legislation on the lines proposed has been enacted in three States, but it is expected that action in other States will follow. For providing loan assistance to Gram Sabhas and cooperatives and promoting more rapid development in the Gramdan areas, a special provision of Rs. 1 crore has been made in the Plan.

4. Cooperation

55. A wide range of difficult and important tasks have been assigned to cooperative organisations in the Third Plan. These call for a great deal of coordinated action on the part of various agencies in the Government, adequate resources, efficient organisation and management and, above all, non-official leaders who are dedicated to the success of the cooperative movement. These aspects should be kept in view in assessing the progress of the cooperative movement during the past few years. In appraising developments since the beginning of the Third Plan, there is the further limitation that, at this stage, for the second year of the Third Plan, firm data are not yet available.

56. Among the major programmes in the field of cooperation under the Third Plan are the extension of the movement to include about 60 per cent of the agricultural population, strengthening and re-vitalising of cooperative organisations at the primary level, provision of short and medium term credit to the extent of Rs. 530 crores and long-term credit (loans outstanding) to the extent of Rs. 150 crores in place of Rs. 203 crores and Rs. 38 crores respectively in 1960-61, extension of cooperative marketing and processing and development of 3,180 cooperative farming societies through a scheme of pilot projects. Towards the end of 1962, it was decided to take up a new programme for the organisation of cooperative consumer stores which provides for the establishment of 4,000 stores at the primary level and 200 stores at the wholesale level.

57. *Cooperative Credit.*—At the end of the Second Plan, there were 212,000 primary agricultural credit and multi-purpose societies with a total membership of 17 million. The Third Plan provides for the revitalisation of

53,000 primary societies and establishment of 31,000 new societies. At the end of 1962-63, about 26,000 societies had been taken up for revitalisation and about 16,000 new societies had been established. Membership of primary societies is estimated to have risen to 23.0 million. The portion of the agricultural population served by cooperative societies rose during the first two years of the Plan from 33 to over 36 per cent. There is considerable variation between States, the proportions of the agricultural population served by cooperatives in States like Assam, Bihar, Orissa and West Bengal being around 15 per cent or less. In view of the weakness of the cooperative movement in the eastern States, a special programme of re-organisation involving additional allocations and a more liberal pattern of Central assistance was taken up towards the end of 1961.

58. The total volume of short and medium term credit advanced through cooperative agencies in 1962-63 amounted to Rs. 267 crores against Rs. 228 crores in 1961-62 and Rs. 203 crores at the end of the Second Plan. About three-fourth of the credit is accounted for by six States, namely, Maharashtra, Uttar Pradesh, Madras, Gujarat, Andhra Pradesh and Punjab. In the remaining States, despite increased coverage in terms of villages and population, the overall impact of the cooperative movement is still relatively small, and urgent steps have to be taken to strengthen cooperative organisations through sound management practices and provision of trained personnel. The same conclusion is reached on an examination of the proportion of overdues in different States. Considerable stress has been laid in the past on linking credit with marketing and with production programmes. However, in both respects, the existing arrangements are, generally, far from adequate. In the intensive agricultural districts efforts are being made to link credit with the production plans of individual farmers but, to ensure steady growth in credit, greater attention has to be given to the aspect of marketing.

59. Compared to short term credit, there has been less progress in making medium term and long term credit available. In this connection, it may be mentioned that a special committee has recently studied the administrative and other aspects of the proposal to channel taccavi loans through cooperatives. In the light of the recommendation of this committee, the Central Government has recommended that except for certain types of operations involving financial risk or long term investment, cooperatives should be the normal agency for providing credit to agriculturists for production and land improvement. While a few States may be in a position to implement this policy fully, in others it is proposed that the approach should be to select districts by turn and, depending on the strength of the cooperative movement, to cover the entire area over a period of three to five years. In a few States where the movement is weak, implementation of this policy may even have to be deferred. Criteria for selecting districts for giving effect to these proposals have also been suggested.

60. Long term credit (loans outstanding) rose to Rs. 60 crores in 1962-63 as compared to Rs. 38 crores two years earlier. An important recent development in relation to long-term credit is the setting up of the Agricultural Refinance Corporation which has an authorised capital of Rs. 25 crores for granting medium and long-term credit by way of refinance or otherwise for the development of agriculture.

61. *Marketing and processing.*—During the Second Plan 1,800 primary marketing societies were set up and federated into apex marketing societies at the State level. A National Cooperative Marketing Federation composed of apex marketing societies was also constituted. The Third Plan envisaged establishment of 544 new primary marketing societies. Of these 210 were set up during the first two years of the Plan. During 1961-62, agricultural produce of the value of Rs. 180 crores was marketed through cooperatives. A number of steps have been recently taken to strengthen cooperative marketing. Every marketing cooperative has been asked to draw up a programme of work and to aim at developing its business so as to be able to handle a definite proportion of agricultural produce arriving in the local market. Arrangements have been made to ensure more effective coordination between the State Cooperative Department and the Department concerned with agricultural marketing. Problems relating to cooperative marketing for plantation crops, for jute in West Bengal, for paddy in Andhra Pradesh and for wheat in Rajasthan have been investigated by special study teams. The State Bank of India has arranged for marketing cooperatives to draw funds from the Bank either directly or through the cooperative banking structure. Cooperatives are also being increasingly associated with price support operations in respect of agricultural commodities. About three-fourth of the sale and distribution of fertilisers is now being undertaken through cooperatives. In this connection, special stress has to be laid on improvement in the organisation and management of these cooperatives.

The Third Plan provided for the construction of about 660 godowns at mandi centres and over 9,000 godowns in rural areas. During the first two years of the Plan 330 mandi godowns and 3,100 rural godowns have been assisted.

62. At the end of the Second Plan, 55 cooperative sugar factories had been licensed and 30 were in production, accounting for about 15 per cent of the total output. In 1962-63 against 57 licensed units, 41 were in production and accounted for 21.6 per cent of the total output. Towards the end of the Second Plan, cooperative sugar factories formed a national federation to provide technical assistance and to coordinate the working of sugar factories in the cooperative sector.

63. Cooperative processing of agricultural products other than sugarcane has made comparatively less progress. In the Second Plan 260 such pro-

cessing units had come up. The Third Plan envisaged the setting up of 680 more cooperative processing units for rice milling, cotton ginning and pressing, oil crushing, jute baling, etc. The programme for the first three years of the Plan envisaged establishment of about 300 units. Of these, about 200 units were taken up in the first two years. In 1961-62 cooperative cotton pressing units accounted for about 11 per cent of the total quantity of the cotton ginned in the country. A significant recent development is the processing of coffee by cooperatives, which now account for nearly 15 per cent of the total quantity of coffee processed. About half the cooperative processing units proposed to be installed in the Third Plan were for rice milling. Progress has been held up to come extent by legal difficulties connected with the issue of licences under the Rice Milling Industry (Regulation) Act, 1958. In regard to these, necessary action has been recently taken. Model blue-prints for different types of processing units were prepared by the National Cooperative Development and Warehousing Board (now the National Cooperative Development Corporation) and made available to State Governments. Arrangements have also been made with the State Bank of India, State Finance Corporations and the Refinance Corporation to facilitate finance of block capital requirements of cooperative processing units. In Maharashtra, the State Cooperative Bank has recently set up a Cooperative Industries Commission for promoting cooperative processing of agricultural products.

64. *Cooperative Farming.*—A detailed programme for the development of cooperative farming was formulated for the first time in the Third Plan. It provides for the organisation of 318 pilot projects, one in each district, comprising in all 3,180 cooperative farming societies and for support and encouragement for cooperative farming societies which might come up voluntarily through local initiative. In the first two years of the Third Plan, 160 pilot projects were organised. These included 994 cooperative farming societies with a membership of 19,800 and a total area of 119,000 acres. In addition 949 new cooperative farming societies came up outside the project areas. These had a membership of 19,462 and a total area of 121,000 acres. By the end of 1963-64, it is hoped that there will be 1,600 cooperative farming societies in pilot areas and 1,450 outside these areas. Advisory boards for cooperative farming have been constituted in all States. Arrangements for training secretaries of cooperative farming societies and for orientation courses for non-official workers have been completed in 12 States. In a few States, the cooperative farming programme has received encouraging response, notably, in Maharashtra, Uttar Pradesh, Punjab, Madhya Pradesh, Rajasthan and Kerala, but elsewhere cooperative farming is still in its early beginnings. A committee has been recently constituted by the Ministry of Community Development and Cooperation to evaluate the working of pilot projects so as to direct attention to existing weaknesses in the execution of the programme and to suggest further measures.

65. *Consumer Cooperatives.*—In November 1962, the Government of India sponsored a new programme for organising a network of consumer cooperative stores in all important towns and cities, the entire cost during the Third Plan being met by the Centre. It was envisaged that over a period of two years, 200 wholesale stores and 4,000 primary stores/branches would be established in cities and towns with a population of 50,000, or more. Assistance is being made available by way of share capital, managerial expenses, cost of strengthening godowns and working capital. By August 1963, 113 wholesale stores and 1,740 primary stores were organised. Various steps are being taken to enable consumer stores to function effectively as, for instance, through arrangements for supplies of textiles and woollen goods directly from mills, recognition of wholesale stores as dealers for purchase of sugar from factories and declaration of primary stores as retail distributing agencies and as fair price shops. Training courses for executives of wholesale stores and for junior personnel have also been organised.

66. *Training and education.*—Since July 1962, the National Cooperative Union and State Cooperative Union have undertaken responsibility for cooperative training and education. There are 13 training centres for intermediate personnel of which 4 are run by State Cooperative Unions, who are also running most of the existing 67 training centres for junior personnel. For members' education the number of peripatetic units has increased from 371 at the end of the Second Plan to 583 at the end of 1962-63. As the role of the cooperative movement in different activities becomes larger, greater attention is being given to specialised courses, for instance, in cooperative marketing, land mortgage banking, management of enterprises, banking, consumer cooperation, etc.

67. *Labour and construction cooperatives.*—Since the commencement of the Third Plan increasing emphasis has been placed on labour and construction cooperatives. At the end of 1961-62 there were 2,872 societies with over 200,000 members. In the rural works programme special emphasis is being given to the organisation of labour cooperatives on a permanent basis. For this purpose suitable patterns of assistance have been prescribed. A National Advisory Board for Labour Contract and Construction Cooperatives was constituted in November 1962.

68. Problems relating to industrial cooperatives have been recently studied by a special working group. Possibilities of extending the role of cooperatives in spheres like dairying, animal husbandry, fisheries, housing and transport are also being investigated.

5. Animal Husbandry, Dairying and Fisheries

69. Though significant results have been achieved in certain fields, the vast potential of animal husbandry, dairying and fisheries yet remains, by

and large, to be tapped. Some of the limitations that held up the development of animal husbandry during the first two Plans, namely, a large proportion of un-economic and surplus cattle, deficient nutrition and shortage of quality breeding stock still persist. It may be mentioned, however, that various programmes calculated to make an impact on these problems have been taken up on a larger scale during the Third Plan, the outlay being of the order of Rs. 120 crores as compared with about Rs. 67 crores in the Second Plan.

70. *Animal Husbandry.*—The following are the statistics of progress in respect of selected programmes during the first two years of the Plan :

Selected Physical Targets and Achievements

Item	1960-61 Cumulative	Third Plan Target	1961-63 Achievement	1963-64 Programme	1961—64 Total	1961—64 as % age of Col. 3
1	2	3	4	5	6	7
1. Key Village Blocks established ..	407	79	32	16	48	60·7
2. Key Village Blocks expanded	114	64	39	16	52	81·2
3. Subsidised rearing of calves	34,791	44,440	12,853	8,500	20,101	52
4. Establishment of Cattle Breeding Farms	—	10	2	2	4	40·0
5. Expansion of Cattle Breeding Farms ..	—	35	9	5	14	40·0
6. Bull Rearing Farms	—	13	4	2	6	46·3
7. Goshalas	255	168	45	30	75	44·7
8. Goasadans ..	61	23	3	5	8	34·8

71. The key village blocks which cover only a limited and dispersed area have not yet been able to make sufficient impact. This subject was considered recently in detail at the Gosamvardhan Seminar held at Bombay. It was emphasised that cattle development programmes should be taken up in an integrated manner over large and compact area, supported by feed and fodder development, mass castration, rural dairy extension, marketing and disease control.

72. Schemes for the development of feed and fodder resources, mixed farming and fodder banks which had been given a high priority in the Third Plan have not made much headway. These programmes are not proceeding satisfactorily even in the IADP districts. There is obvious need for intensifying them by making the necessary financial, administrative and technical arrangements.

73. Till 1962-63, about 92 per cent of the inoculable bovine population has been vaccinated against rinderpest. Work has been completed in all the

States except U.P., Orissa, Madhya Pradesh, Rajasthan and Gujarat. It is, however, necessary that immediate steps are taken to set up Animal Quarantine Stations during the remaining period of the Plan.

74. The Third Plan laid great stress on sheep and wool development programmes and had made provision for the establishment of 8 training centre, 15 new sheep breeding farms and 158 sheep and wool extension centres. As against these targets, during the first two years of the Plan, only 2 training centres, one new sheep breeding farm and 16 sheep and wool extension centres have been started. These programmes require greater attention in view of the national emergency. Organisation of scientific sheep rearing, wool grading and marketing are essential elements of these schemes. A large-scale sheep shearing and wool grading programme linked to sheep development forms an important part of the United Nations Special Fund Project recently commenced in Rajasthan. A training school in wool grading has been started at Jodhpur under the guidance of five specialists from Australia. A survey of sheep and wool production in Punjab has been conducted and similar work for grading and marketing will be extended there. In order to coordinate research in sheep and wool production, a Central Institute is also being established in Rajasthan with two sub-stations.

75. Intensive poultry development blocks, including the Pilot Demonstration Project, Gurdaspur, which provide the necessary facilities in an integrated manner, have helped in popularising commercial poultry development in rural areas surrounding big cities. Indigenous manufacture of poultry equipment has also made some progress. Two large-scale poultry breeding farms with foreign collaboration have been established. Sixteen egg and poultry production-*cum*-marketing centres, each with a capacity of 10,000 eggs and 300 table birds per day, are being set up, seven in the border States to meet defence requirements and nine in other States for holding the price line. Balanced poultry feed is now being manufactured by about 30 private firms and made available to interested poultry farmers.

76. *Dairying and Milk Supply.*—The Third Plan provides for 21 milk schemes as spill-over from the Second Plan and for the establishment of 55 new milk supply schemes in cities with a population exceeding one lakh and in growing industrial townships. Out of the former 21 schemes, 6 have been completed, 11 are under implementation and 4 are expected to be taken up during 1963-64. Out of the latter 55 schemes, two schemes have been completed, 11 are under implementation and 13 are being taken up during 1963-64. Difficulties of foreign exchange coupled with inadequate progress in the indigenous manufacture of dairy equipment have retarded the progress of this programme.

77. Emphasis was laid in the Third Plan on the need for linking up dairy schemes with the surrounding rural areas in order to make a tangible

impact on the development of cattle both for milk supply as well as for draught purposes. It is essential to keep this aspect in view while establishing new dairy schemes in different towns. Further, as mentioned in the Plan, cows' milk should be purchased by the dairies at the same price as buffalo's milk.

78. A creamery at Aligarh and milk product factories at Amritsar and Rajkot have been started. Work on the establishment of creameries at Barauni and Junagadh is in hand. Two of the 6 milk drying plants to be set up for Defence requirements are under construction at Anand and Mehsana and those at Barauni, Bikaner, Delhi and Dhulia/Miraj are likely to be taken up during the plan period.

79. Out of a provision of four cattle-feed compounding factories, one is being set up at Anand and the other three are likely to be taken up during the plan period.

80. *Fisheries.*—During the period 1961-63, about 30 million additional fry and fingerlings were distributed and 5 demonstration farms have been established. A scheme for intensive fish production in 600 development blocks in the country has recently been drawn up jointly by the Ministry of Food and Agriculture and the Ministry of Community Development and Cooperation. This scheme when implemented will bring annually substantially increased production.

81. The programme for the development of marine fisheries included the supply of 4,000 mechanised boats, use of improved types of fishing nets and gears, and provision for landing and berthing facilities for fishing vessels in 16 ports. During the first two years of the Plan, only 790 boats have been mechanised. Survey and other preliminary arrangements have been made in respect of 9 ports. During the Third Plan, 12 additional fishing vessels are proposed to be procured and four new off-shore fishing stations to be set up at Veraval, Mangalore, Pradip and Port Blair. So far order for only one fishing trawler has been placed and it is proposed to obtain 3 vessels during 1963-64. Out of 72 ice and cold storage plants included in the Third Plan, only six have been set up so far and the arrangements for three out of 20 additional refrigerated rail vans have been made. One of the difficulties in accelerating the tempo of several fisheries development programmes has been the shortage of foreign exchange.

82. The Plan provides an allocation of Rs. 1 crore as loan assistance to fisheries cooperatives. Loans amounting Rs. 20 lakhs have already been issued to cooperatives in several States.

83. The Central Institute of Fisheries Technology, Cochin, has been equipped and extensive technical investigations and research are being carried out to assist fishing industry. A Fisheries Institute for training fisheries

administrative personnel at the district level has already started functioning at Bombay. An Institute for training of fisheries operatives has been established at Cochin and training will start by the end of the year.

6. Agricultural Labour

84 Programmes for rural development in general, such as agriculture and community development, rural water supply, expansion of village and small scale industries and social welfare schemes are expected to benefit, to a large extent, the weaker sections in the rural community. Schemes intended directly to benefit agricultural workers include welfare of backward classes, rural works programme, settlement of landless agricultural workers on surplus land made available through the enforcement of ceilings and on Bhoodan and Gramdan lands etc. Progress of these schemes and their likely achievements have been reviewed in other chapters. This section deals with schemes for reclamation of land and colonisation and resettlement of landless agricultural workers and provision of house-sites for them.

85. The essential preliminary step for taking up the schemes for colonisation and resettlement of landless labourers on a large scale, is the general survey of land and demarcation of areas suitable for cultivation. A committee was appointed by the Government of India to make a rapid survey of large areas of wastelands, constituting blocks of 250 acres or more, and to recommend suitable measures for reclamation and resettlement on land fit for cultivation. This committee has submitted reports in respect of 12 States and has recommended the reclamation of about 10.8 lakh acres at an estimated cost of Rs. 16.8 crores, the average cost of reclamation being about Rs. 158 per acre. The States that still remain to be surveyed are Assam, Rajasthan and Orissa. In Assam the State Government has itself appointed a committee for the purpose and the work in the other States needs to be expedited.

86. In order to supplement the work of this committee, a centrally sponsored scheme with a provision of Rs. 69 lakhs was included in the Plan for survey of smaller areas of land in villages which are suitable for cultivation and resettlement. Provisions for resettlement have been made in the State Plan amounting to Rs. 3.67 crores, supplemented by a Centrally sponsored scheme of Rs. 7 crores. Rs. 5 crores have been provided for acquisition of land in villages for allotment of house-sites to agricultural labourers under the Village Housing Project. Progress made under this scheme has been somewhat slow.

87. The scheme for survey and categorisation of culturable wastelands in small blocks of less than 250 acres in villages has been taken up in 13 States covering about 160 districts. In 1962-63, when this scheme was initiated, provisional sanctions for an amount of Rs. 1.92 lakhs were issued

in respect of four States. In 1963-64, Rs. 9 lakhs have been provided for 13 States. In Madras about 1,40,000 acres have been located as a result of survey in 10 districts. In Punjab, survey has been completed in three districts at a cost of about Rs. 45,000 and about 11,500 acres have been indentified. Survey in five more districts is continuing. Results from other States are awaited.

88. Schemes for reclamation and resettlement of landless agricultural workers have been sanctioned in 12 States. In 1962-63 the amount utilised was very small. In 1963-64 provision for about Rs. 12 lakhs as central assistance has been made. During the first two years of the Third Plan, 20,000 families have been settled on land. Schemes for the resettlement of about 85,000 landless families have been finalised for the rest of the Plan period. The progress of schemes both for survey and resettlement has been very slow. In view of the vital importance of this programme it is necessary that the State Governments take vigorous steps for its implementation.

89. The Bhoodan movement initiated by Acharya Vinoba Bhave has been able to achieve tangible results through purely voluntary efforts. About 11 lakh acres of land received under Bhoodan have already been distributed to landless labour in different States. It is desirable that while sanctioning financial assistance under the Centrally sponsored scheme preference should be given to agricultural workers who receive lands under the Bhoodan movement.

90. For reviewing periodically the progress of these schemes and suggesting necessary measures a Central Advisory Committee on Agricultural Labour has been set up in the Planning Commission. State Governments have been requested to set up similar committees for reviewing these programmes. Some States have already done so; it is hoped that the remaining States would take similar action soon.

7. Rural Works Programme

91. The Third Plan provides for a rural works programme, for expansion of employment opportunities and fuller utilisation of manpower resources of rural areas. The programme is intended to supplement development schemes embodied in the State and local plans. It is being implemented with special reference to the agricultural slack seasons in areas which have a high incidence of unemployment and under-employment. The rural works programme is to be implemented as part of an integrated plan with a view to tackling the problem of unemployment in an intensive manner at the local level. The works taken up under the programme include mainly minor irrigation, soil conservation, afforestation, drainage, land reclamation, flood protection bunds, raising of villages in flood affected areas and improvement of communications. In road programmes, preference is to be given to roads which connect villages with market centres. With a

view to speeding up the utilisation of irrigation facilities, it has been agreed that rural works funds may be utilised for meeting the initial expenditure on the construction of field channels where the work is undertaken by panchayats or other agencies, the cost being eventually recovered from the beneficiaries.

92. The programme was initiated in the form of pilot projects in 32 blocks towards the end of 1960-61. In March 1962, 196 more blocks were allotted as part of a second series. For the third series about 600 blocks have so far been allotted. Of the 228 projects in the first two series, work had been effectively organised in 178 blocks by the end of the second year of the Plan. Expenditure up to the end of March 1963, was of the order of Rs. 1.5 crores and employment created in terms of man-days has been estimated at 75 lakhs. The additional employment opportunities have been availed of largely by landless sections of the rural population. The wages paid per day for male unskilled workers under the rural works programme have ranged from Re. 1 to Rs. 2.50.

In spite of the slow start, the programme which now covers more than 800 blocks can be said to be fairly under way. A special cell for the implementation of the programme has been set up at the State headquarters in most States and action has been taken for strengthening the technical staff at the block level. Steps have also been taken to expedite sanctions and release of funds.

93. In the execution of works included in this programme, voluntary organisations including labour cooperatives have to play a vital role. So far Panchayats have been the main agencies in the execution of works. The process of organising labour cooperatives is still in its early stages and voluntary agencies have not yet taken up the execution of construction works in rural areas on any significant scale. In order to expedite the organisation of labour cooperatives in areas selected for this programme it is proposed to assist them out of funds provided for the rural works programme.

94. It is hoped to extend the rural works programme during the next two years to another 1,000 to 1,200 blocks and also to intensify work in a number of districts in which the rural works programme has been already taken up.

8. Land Reform

95. The main aspects of land reform are the abolition of intermediaries, tenancy reform, ceiling on land holdings and consolidation of holdings.

96. *Abolition of Intermediaries.*—The programme for the abolition of intermediaries has been mostly completed. Considerable progress has also been made in the payment of compensation to the ex-intermediaries. The

total amount of compensation is estimated at about Rs. 641 crores (compensation Rs. 421 crores, rehabilitation assistance Rs. 92 crores and interest Rs. 128 crores). About Rs. 230 crores have been paid so far, Rs. 130 crores in bonds and Rs. 100 crores in cash. It is hoped that the compensatory bonds for the remaining amount will be issued by the end of the Third Plan period.

97. *Tenancy Reform.*—Comprehensive legislation for tenancy reforms has been enacted in several States. In some States the existing provisions for security of tenure are of temporary nature and comprehensive measures have not yet been enacted or enforced, although ejectment of tenants has been stayed temporarily. In Andhra area, an interim legislation provides for stay of ejectments. In Telengana area to which the Hyderabad Tenancy and Agricultural Lands Act applies, some of the principal provisions have not been enforced pending enactment of tenancy legislation for the entire State of Andhra Pradesh. In Bihar, tenancies are still generally regulated under the Tenancy Act of 1885 with some modifications. In Madras, the present legislation is of a temporary nature and comprehensive proposals for tenancy legislation are still under the consideration of the State Government. In Mysore, the Land Reform Act was enacted in 1960 but its implementation was stayed pending its amendment to incorporate the recommendations of the Government of India. The Amendment Act has yet to be promoted. In Orissa also, the Land Reform Act, 1960 has not yet been enforced due to pending amendments. Delays in enacting comprehensive legislation create a great deal of uncertainty which is inimical to efforts to increase agricultural production.

98. *Security of Tenure.*—Effectiveness of the provisions of security of tenure centres on the issue of resumption and the safeguards included in the legislation to prevent voluntary surrenders which have taken place on a considerable scale in several States. The right to resume land for personal cultivation for which a provision still obtains in several States, has tended to create uncertainty and to diminish the protection afforded to tenants. It has been recommended in the Third Plan that in view of the period that has already elapsed, there should be no further right of resumption except for owners holding land equivalent to a family holding or less. With regard to surrenders, as stated in the Plan, most voluntary surrenders of tenancies are open to doubt as *bona fide* transactions and this has been confirmed by such enquiries and investigations as have been undertaken. Recommendations have been made in the Third Plan to meet the problem of surrenders. Only in Bihar, Madhya Pradesh, Mysore, Manipur and Tripura, provisions have been made for the regulation of surrenders on the lines suggested in the Plan. In Gujarat and Maharashtra, surrenders are to be registered but other measures suggested in the Plan have not been adopted. On the whole both administrative and legislative action taken so far have fallen short of the recommendations in the Plan in several States.

99. *Ownership for Tenants.*—It was expected that in the course of the Third Plan steps would be taken to complete the programme for conferring rights of ownership on tenants of non-resumable lands. Progress made in this direction has been uneven. In Gujarat, Maharashtra, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal (in respect of under-raiyats), Delhi, Himachal Pradesh, Manipur and Tripura, the law provides for bringing tenants and sub-tenants into direct relationship with the State. In the Punjab, the right of purchase is still optional; and it has been the common experience that the optional right of purchase is scarcely exercised. Several States have not made the necessary legislative provisions. In some States where the provisions for conferring ownership rights exist, the implementation has not been uniformly effective.

100. *Regulation of Rents.*—There are considerable variations in the maximum rents prescribed in the legislation. In several States, maximum rent has been fixed at 1/4th of the produce or less. In some States, such as Andhra Pradesh, Jammu & Kashmir, Madras, Punjab and West Bengal (in case of share-croppers), it is still between one-half and one-third of the gross produce. In most States rents are payable generally as a share of the crop. Share crop rents are difficult to enforce. Commutation of rents into cash rents will facilitate enforcement of rent regulation.

101. *Ceiling on Land Holdings.*—Legislation for ceilings has been enacted in all States except the former Punjab area where a ceiling on ownership has yet to be provided. Meanwhile, in this area the Government have the power to settle tenants on surplus lands under the personal cultivation of landholders in excess of a declared limit. Out of 420,000 acres which have been declared surplus, 150,000 acres have been utilised for settling tenants and landless persons.

102. Some progress has been made in the implementation of legislation regarding ceilings. In Jammu and Kashmir, during the Second Plan period, 4.5 lakh acres were taken over and distributed. In West Bengal, the State Government has come into possession of 524,000 acres of agricultural land which is being leased out to share-croppers and landless workers on a yearly basis pending its final disposal; further area will become available as implementation proceeds. In Uttar Pradesh 140,000 acres have been declared surplus, of which 24,000 acres have been distributed. In Maharashtra, about 90,000 acres held by sugar factories have been declared surplus and 35,000 acres have been taken over by the State Government. Pending formation of co-operative farming societies, this area is to be managed by the Maharashtra State Farming Corporation. In Andhra Pradesh 52,000 acres of surplus land have been located so far. In Assam, Bihar, Gujarat, Madhya Pradesh, Madras, Delhi, Himachal Pradesh, and parts of Tripura the provisions in the legislation relating to ceilings have been brought into force. Rules have been framed and preliminary steps are being taken for

the implementation of the legislation. In other States, provisions concerning ceilings have yet to be enforced. At this stage, it is a matter of some urgency from the point of view of agricultural development to ensure speedy and effective implementation of the legislation which has been enacted.

103. Legislation for ceilings tends to be defeated because of inadequate measures for preventing transfers of land. The need to provide for the problem of transfers in the legislation itself has been emphasised in the Third Plan. The present position calls for review in several States.

104. *Consolidation of Holdings.*—By the end of the Second Plan, about 29.5 million acres had been consolidated. The target proposed for the Third Five Year Plan was 31 million acres. During the first two years of the Plan about 14.6 million acres have been consolidated and, at the end of 1962-63, consolidation work was in progress over nearly 8 million acres. It is expected that the programme set out in the Plan will be carried out.

105. *Problem of Implementation.*—A number of surveys of land reform undertaken in different parts of the country through the Research Programmes Committee of the Planning Commission have brought out the extreme importance of effective implementation of the legislation which has been enacted. Failures in implementation take away some part of the benefits of the progressive land reform legislation which States have undertaken. A major obstacle in implementation arises from the fact that a large proportion of leases are oral and tenants cannot prove their title through documents. In a number of States, such as Andhra Pradesh, Assam, Bihar, Kerala, Madras, Mysore and Orissa, the land records do not contain information about tenants and share-croppers. There are States also in which records of tenants and share-croppers are maintained, but these are often deficient. An up-to-date and correct record of tenancies is a necessary condition for the implementation of land reform legislation. With a view to expediting preparation and correction of records it was agreed that such schemes might be included in the plans of States and would receive assistance from the Central Government. In some States, provision to this effect has been made in the annual plans, but practical action still lags behind.

CHAPTER IX

IRRIGATION AND POWER

IRRIGATION

Targets and Achievements.—At the time of formulation of the Third Plan, the State Governments had estimated that a potential of 13.2 million acres (gross) would be created by the end of the Second Plan with a utilisation of 10 million acres. Achievement subsequently reported was a potential of 12.09 million acres and a utilisation of 8.59 million acres (gross). The target for additional potential and utilisation in the Third Plan was 16.3 million acres and 12.8 million acres respectively. Recent estimates of State Governments place the likely achievements at 11.1 million acres of potential and 10 million acres of utilisation. On this basis, the shortfall would be 5.2 million acres and 2.8 million acres respectively. The State-wise position regarding targets indicated by the State Governments for potential and utilisation in the Third Plan, and the likely achievements is brought out in the Annexure.

2. *Reasons for shortfall in potential.*—It will be seen from the Annexure that the shortfalls in potential as compared to the targets are large in many States. There are two main reasons for the large shortfall in potential. Firstly, there has been optimistic assessment of targets at the time of formulation of the Third Plan. Secondly, there has been delay in the completion of certain projects owing to increase in their estimated cost partly due to under estimation at the initial stage and partly due to rise in the cost or materials and wages. In a few cases, shortfalls have also resulted from the inability of certain States to make adequate provision for the schemes owing to the tight position of their resources. Shortage of cement, steel, etc. and inadequacy of foreign exchange for procurement of machinery and spare parts had also a marginal effect in causing shortfalls.

3. There has been a tendency to press for the inclusion of a large number of new schemes in Five Year Plans and later to want to make an early start on them by diverting funds provided for continuing schemes. This results in delay in the completion of schemes and consequent deferment of benefits, besides reducing financial returns. It is essential that in formulating proposals for the Fourth Plan, the State Governments should ensure that new schemes are not sponsored to the detriment of continuing schemes and that medium schemes are given preference as they give early benefits.

4. *Measures suggested for improving implementation of irrigation programmes.*—It is proposed to send a Team from the Central Water and Power Commission to visit States to review with the officers of the State

Governments the progress on each irrigation scheme included in the Third Plan. This review will be undertaken with the object of bringing to notice the difficulties and handicaps, if any, in their speedy implementation and advising the State Governments and the Centre regarding suitable measures to be taken to ensure fulfilment of the programme, especially as the additional potential to be created and utilisation to be achieved during the remaining period of the Plan is very considerable.

5. For keeping an effective watch on the progress of projects, it is necessary that there should be systematic reporting. Revised simplified proformae for progress reports on irrigation and power schemes were circulated by the Ministry of Irrigation and Power to the State Governments in October 1962, in the hope that States would submit them by due dates. Very few progress reports have, however, been received. It is important that the State authorities should forward these progress reports to the Centre on prescribed dates.

6. The Third Five Year Plan has laid emphasis on thorough and timely investigation of schemes. The position in this respect is still not satisfactory. It is essential that, in the remaining Plan period, concerted effort is made to complete investigations and prepare project reports not only of the schemes already included in the Third Plan, but also of those which the States propose to sponsor for the Fourth Plan.

7. *Reasons for shortfalls in utilisation and measures for improvement.*—The table below shows the yearwise position of utilisation of potential created :

(Million acres—gross)

Sl. No.	Benefits	To end of Third Plan 65—66 Target	Second Plan 60—61 Actual	61—62 Actual	62—63 Estimated	63—64 Anticipated	65—66 Anticipated
1	2	3	4	5	6	7	8
1.	Potential at outlets	29·47	12·09	12·81	14·27	16·34	23·16
2.	Utilisation ..	22·77	8·59	9·40	10·60	13·08	18·60
3.	Percentage utilisation .. ... (item 2/item 1)	77	71	73	74	80	80

It will be seen that the percentage of utilisation in 1961-62 has been 73 and it is now expected to rise to 80 at the end of the Third Plan as against the anticipation of 77 at the time of formulation of the Plan. The shortfall

in benefits has not, therefore, resulted from any slackening in the pace of utilisation of the irrigation potential created. It arises mainly from a reduction in the quantum of utilisation because of the shortfall in the potential created. However, the percentage of utilisation continued to be low in Gujarat, Maharashtra, Madhya Pradesh and Mysore. Concerted efforts would be required in these States to improve utilisation.

8. The development of irrigation presupposes not only the existence of field channels but also the adoption of other measures such as setting up of experimental and demonstration farms, soil surveys for determining cropping pattern, advance planning for supply of improved seeds and fertilisers, etc. This involves the closest coordination between the Irrigation and Agriculture departments. All these aspects of development of irrigation have been systematically pursued with the State Governments. The Central Teams which visited the States recently in connection with agricultural production programme for 1963-64, have emphasised the necessity of close coordination amongst the concerned State Departments in this respect and have also suggested measures for achieving this coordination. Irrigation Development Committees exist in several States at the State and district levels and also for certain large projects. It is important that in States where such committees do not exist, they should be set up quickly. While the usefulness of these Committees is recognised, the Teams felt that their effectiveness would be greatly enhanced if, at the same time, the overall responsibility for ensuring effective coordination between the various agencies was placed on an officer to be specified at the State, project and local levels. At the State level, the overall responsibility might be placed on the State Development Commissioner. It should be his duty to ensure that the various plans and instructions are implemented effectively and in accordance with agreed schedules. At the district level, this responsibility might be placed on the Collector. Targets for completing field channels and other related measures for utilisation of the potential created should be worked out, area by area fixing specific tasks for the various departments and agencies concerned, the functions and responsibilities of which should be properly dovetailed to promote systematic and sustained efforts for tackling the problem in an integrated manner; and full administrative, technical and financial details should be worked out up to the ground level. Responsibility for securing the observance of obligations on the part of the beneficiaries and for utilisation of the available irrigation facilities have been placed on Panchayat Raj institutions, especially Panchayat Samities and Village Panchayats.

9. It was suggested to the States that where legislation laying the obligation for the construction of field channels on beneficiaries did not exist, it should be introduced quickly. The necessary legislation already exists in several States and is being introduced in some others. The remaining States, namely, Assam, Kerala, Mysore and West Bengal have also been advised to promote and enact such legislation.

10. *Flood Control.*—During 1961 and 1962, heavy floods were experienced in several parts of the country. These floods were particularly severe in Assam where the existing embankments were damaged in several places. Apart from the problem of affording protection from floods, the problem of waterlogging in the Punjab has called for more vigorous programmes requiring larger outlays than envisaged in the Plan. In Kerala, the problem of sea-erosion is assuming great urgency. The Plan outlays for flood control, drainage, anti-waterlogging and anti-sea-erosion will therefore, need to be increased in some States, especially in Assam, Punjab and Kerala.

11. *Financial Outlays.*—The outlay provided for major and medium irrigation in the Third Plan was Rs. 600 crores. This programme was reviewed in January 1963 with a view to determining which of the schemes could be rephased or slowed down in the context of the present emergency. It was felt that all medium irrigation schemes (*i.e.*, those costing less than Rs. 5 crores each) should be proceeded with as planned, and even accelerated to the extent feasible to provide early benefits. Of the 56 major projects included in the Plan, rephasing or slowing down of 19 projects, on which little or no expenditure had been incurred was suggested. The anticipated outlay for the first three years of the Plan is Rs. 293 crores. For flood control, the Third Plan outlay was Rs. 62 crores, and the anticipated outlay for the first three years is Rs. 48 crores. In Assam and Punjab, the Third Plan provision for flood control schemes has already been exceeded.

12. *Financial results of irrigation and multipurpose projects.*—An analysis of the projects approved since the Second Plan shows that, on the basis of existing water rates, a majority of them do not earn enough revenues to cover working expenses and interest charges, yet these had to be taken up from other wider considerations, such as increasing agricultural production, providing relief to areas liable to famine or scarcity, benefitting the backward or tribal areas and for improving the standards of living. From the budgets of States, it appears that the loss in the first three years of the Third Plan would be of the order of Rs. 30 crores per annum. State Governments should carefully consider how best to reduce these losses. The measures suggested in this regard during the last three years are suitable increase in water rates, levy of compulsory cess to cover maintenance and operation charges where water charges are optional, recovery of betterment levy, and acceleration of pace of utilisation.

13. *Betterment Levy.*—Legislation for betterment levy has already been enacted in all States except Uttar Pradesh, West Bengal and Jammu & Kashmir. The States of Uttar Pradesh and West Bengal had agreed to enact the legislation early in the Third Plan, but this has yet to be done.

14. The target of receipts from betterment levy in the Third Plan was Rs. 38·7 crores. The anticipated realisation in the first three years of the

Plan are only Rs. 5·76 crores. Unless the State Governments take steps to enforce the legislation effectively, little improvement can be expected in the realisations.

15. *Soil conservation in river valley catchments.*—In the Third Plan, an outlay of Rs. 11 crores has been provided as a centrally-sponsored programme under 'Agriculture' for soil conservation works in river valley areas to cover about 7·4 lakh acres of the catchment area with forest, agriculture and pasture. The anticipated outlay in the first three years of the Plan is about Rs. 4 crores. On account of organisational deficiencies, the achievement of the physical programme in the first two years of the Plan has been only about 17% of the target fixed for the Third Plan, and even if the programme for 1963-64 is implemented fully, it will only bring the percentage to about 41 of the target. The task left over for the last two years of the Plan is, therefore, large and is not likely to be achieved without special efforts by State Governments.

Power

16. The Third Plan envisaged augmentation of the aggregate generating capacity from 5·7 million kW in 1961 to 12·7 million kW by 1966. The actual installed generating capacity realised in 1961 was, however, 5·58 million kW. This is now anticipated to rise to 12·5 million kW by March 1966. The likely achievement of benefits during the Third Plan would be as below :

Item	Unit	1960-61	1961–62 actuals	1962-63	1963-64 Estimate	1965—66	
						Target	Likely achievement
Installed capacity	Million kW	5·58	6·03	6·72	7·75	12·69	12·50
Towns and Villages electrified	Number	24,209	27,632	31,979	—	43,000	43,000

17. The kilowatt hours generated including captive plants would be as below :

Item	Unit	1960—61	1961—62	1962—63	1963—64	1964—65	1965—66 Target
kW hrs generated	Billions	20·1	22·9	25·6	29·8	37·4	45·0
Increase over 1960-61	per cent	—	13·95	27·4	48·3	86·1	123·8

Considering the improvements in the utilisation of plant capacity in the first two years of the Plan, the target is expected to be achieved and possibly exceeded.

18. *Measures to mitigate power shortages.*—Mainly because of the slow progress of power schemes in Second Plan, due to foreign exchange difficulties there has been shortage of power in various parts of the country. In order to mitigate it, implementation of schemes already taken up has been receiving the closest attention. High priority was assigned to power schemes for release of foreign exchange in the current Plan. In addition several new power schemes, aggregating to 1·1 million kW, not originally included in the Third Plan have been accepted. A capacity of 0·6 million kW is expected to materialise from these schemes in the Third Plan itself. Also action on a number of Fourth Plan schemes is being initiated. By September 1963 schemes aggregating to 0·7 million kW were accepted for advance action.

19. The power supply position in different parts of the country has been constantly under review and appropriate measures were taken wherever feasible. Most of the recommendations of a Committee set up to examine the causes of breakdowns of power supply in Bihar-Damodar Valley Corporation-West Bengal region have been accepted. A significant development which was the outcome of the recommendations of a study team for augmenting power supply to coalfields was the interconnection of Rihand power system in Uttar Pradesh with the Bihar-Damodar Valley Corporation-West Bengal power system. The power supply position in the latter region was causing concern in 1961 due to large increase in demand in vital sectors and certain breakdowns in important power equipment. Arrangements were made to divert the surplus power available from the Rihand power station to the Bihar Damodar Valley Corporation-West Bengal region. Although the available surplus was only 20 MW continuous, the interconnected and parallel operation of the two grids has enabled Damodar Valley Corporation to avail of over 100 MW of peaking power. This, as also supply of 10 MW from Hirakud, has considerably eased the power supply position in this area.

20. In order to have a close coordination between the power supply arrangements and licensing of industries, a representative of the Ministry of Irrigation and Power is now represented on the licensing committee of the Ministry of Industry. State Governments have been requested to express a definite opinion regarding the availability of power for any new undertakings or for substantial expansion of an existing one, involving consumption of 2,000 kW or over of power.

21. In the wake of emergency, instructions have been issued to discourage nonessential loads and to give high priority to supply of power to

defence oriented and other essential industries. An emergency pool of generating plants is being created in the Ministry of Irrigation and Power by acquiring 2 × 12.5 MW gas turbines which could be pressed into service at short notice.

22. *Review of power projects.*—In 1961, a team of officers from the Centre visited all the States to review the implementation of power programmes. The team found that in many of the projects there was inadequate scheduling of works with the result that implementation lagged behind. On some of the projects action on ancillary items such as house crane, gates, control cables, piping and instrumentation, coal and ash plant, etc. was not being taken up simultaneously. In several States there was no agency at the State level to review the progress of power projects with a view to discovering and removing bottlenecks. Finally shortages of key materials such as cement, steel, welding electrodes, detonators and aluminium rods have affected the progress of power schemes from time to time.

23. The above points were brought to the notice of the various State Governments and are being pursued further where necessary. A special cell in the Ministry of Irrigation and Power and a separate Directorate in the Central Water & Power Commission have been set up to give assistance to State Governments and project authorities in procurement of key materials, release of foreign exchange and obtaining of import licences.

24. *Appraisal of power position in States by the end of the Third Plan.*—Owing to delays in the progress of industries such as fertilisers, steel, aluminium, etc. it has been estimated that there will be a shortfall of about 1 million kW in the power demand by the end of Third Plan as compared to estimates made at the time of formulation of the Plan. Except for a few States, such as Andhra Pradesh, Gujarat, Punjab, Rajasthan and Uttar Pradesh, by and large, the power supply position in the rest of the country is expected to be satisfactory at the end of Third Plan. The expected shortage in Andhra Pradesh can be made good by construction of inter-State links between the power systems of Madras, Mysore and Kerala and their interconnected operation. State Governments concerned have been requested to expedite the construction of these link lines, so as to complete them during the next two years. Power shortage in Punjab, Rajasthan and Uttar Pradesh can be mitigated to a large extent by the proposed parallel operation of the Punjab-Delhi-Uttar Pradesh system. In regard to the shortage in Gujarat, this can be taken care of by timely completion of the inter-State link between Maharashtra and Gujarat. It has been suggested to the Mysore Government that they should extend the 220 kV Sharavathy-Hubli transmission line to connect with Koyna power house so that some power can be transmitted towards Maharashtra and generating plant in the latter can meet the shortage in Gujarat.

25. It may be noted that interconnections and integrated operation of neighbouring power systems have several advantages such as reduced load because of a better diversity factor, reduction in standby capacity, better utilisation of plant capacity and economies resulting from large unit sizes and feasibility of interchange of power during emergencies.

26. *Transmission and distribution.*—The Third Plan provided Rs. 222 crores for transmission and distribution and Rs. 105 crores for rural electrification. The expenditure in the first three years of the Plan is expected to be Rs. 120 crores and Rs. 69 crores respectively. It is felt that the provisions for transmission and distribution were inadequate in some States.

27. *Rural Electrification.*—Rural electrification is making satisfactory progress. Out of 20,000 additional villages expected to be electrified during the Third Plan, 7,770 villages have been covered in the first two years of the Plan. The target for rural electrification set for the Third Plan for the country as a whole is likely to be achieved and perhaps exceeded.

28. *Advance action on Fourth Plan schemes.*—One of the important lessons to be learnt from the power position in the last two years is the need to take effective action in advance to avoid imbalance between demand and supply in future years. Planning has to be a continuous process and designed to yield continuous and adequate flow of benefits year after year. Commissioning of major power stations takes more than five years. It is anticipated that the additional benefits required in each year of the Fourth Plan would be of the order of 2 million kW. In the light of these considerations, commencement of work on a number of new schemes needs to be authorised during the remaining period of the Third Plan in addition to those already accepted.

29. *Outlays in the Third Plan.*—It was stated in the Third Plan that the estimated cost of the power programme in the public sector would be of the order of Rs. 1,039 crores. The total expenditure in 1961-62 was Rs. 139 crores and in 1962-63 Rs. 183 crores. The outlay during 1963-64 has been placed at Rs. 247 crores making the total for the first three years Rs. 569 crores. The costs of some of the schemes such as Sharavathy, Talcher and Rana Pratap Sagar projects have risen considerably over the original estimates. Also, some new schemes have been introduced for execution in the Third Plan. In view of these, the outlay on Power programmes in the States will need to be increased by about Rs. 91 crores, primarily by readjustment within the State Plans.

30. *Fuel efficiency and transmission losses.*—As the power systems become larger, improvement in operational efficiency, particularly in thermal plants could lead to substantial savings in running costs and reduction in consumption of coal. A fuel efficiency unit has been set up in the Central Water and Power Commission to examine and pursue this aspect.

Similarly, the question of reducing transmission and distribution losses and thus making better use of available generating capacity has been taken up with the State Governments.

31. *Financial working of State Electricity Boards.*—At present, the earnings of the State Electricity Boards are not quite adequate for financing future developments and some Boards are incurring losses. In view of the importance of this subject, a Working Group on Price Policy of Electricity Undertakings has been set up. This Group will study various aspects of financing public sector electricity undertakings and recommend appropriate policies in regard to tariffs, depreciation and redemption of capital.

32. *Power and Energy Survey Committee.*—An important step taken with regard to power development is the appointment of two Committees—one to undertake electric power survey and the second for a detailed energy survey. The studies made by these Committees will provide valuable material for future planning in the fields of energy and power.

ANNEXURE

Position regarding creation of irrigation potential from major and medium irrigation schemes and its utilisation

('000 acres gross)

Sl. No.	Name of State	Potential					Utilisation				
		1960-61	1963-64		1965-66		1060-61	1963-64		1965-66	
		As reported in the Third Plan (estimated)	As reported later (actual)	(Anticipated)	As reported in the Third Plan (Target)	As now anticipated	As reported in the Third Plan (estimated)	As reported later (actual)	(Anticipated)	As reported in the Third Plan (Target)	As now anticipated
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	830	637	979	3,495	1,850	736	464	841	2,293	1,344
2	Assam	—	—	—	88	7	—	—	—	79	5
3	Bihar	915	966	1.105	3,674	2,961	720	658	910	2,720	1,771
4	Gujarat	640	616	984	1,716	1,601	227	164	504	1,091	824
5	Jammu & Kashmir	5	11	26	66	50	5	5	20	43	25
6	Kerala	358	350	407	613	612	358	350	407	613	612
7	Madhya Pradesh	95	83	360	1,405	1,041	75	61	176	925	530
8	Madras	611	618	637	824	736	581	563	634	822	711
9	Maharashtra	233	173	458	1,352	688	105	95	214	813	449
10	Mysore	707	544	1,102	1,400	1,358	324	293	730	1,200	1,175
11	Orissa	1,000	900	1,127	2,287	1,755	720	696	987	1,666	1,516
12	Punjab	3,307	3,307	3,954	4,357	4,152	2,957	2,348	3,487	4,258	4,000
13	Rajasthan	734	560	1,146	2,382	1,657	618	414	931	1,763	1,384
14	Uttar Pradesh	2,118	1,836	2,421	3,712	2,834	1,479	1,446	1,931	2,521	2,406
15	West Bengal	1,690	1,487	1,634	2,103	1,858	1,084	1,036	1,306	1,968	1,846
	TOTAL ..	13,243	12,088	16,341	29,474	23,160	9,989	8,593	13,078	22,775	18,598

CHAPTER X

VILLAGE AND SMALL INDUSTRIES

THE programmes for the development of village and small industries under the Third Plan envisaged a considerably enlarged scale of effort for achieving the principal objectives of expanded employment opportunities, larger production through adoption of improved techniques and dispersal of industries in small towns and rural areas. On the whole, the programmes as implemented over the last two and a half years have met with some success in realising these objectives.

2. It is roughly estimated that additional whole-time employment was created for about 2·5 lakh persons and part-time for about 6 lakh persons during the two years 1961-63. Besides achieving an increase in production in the different small industries and in the exports of their products, the sector as a whole has also made a significant contribution towards meeting certain defence requirements. Programmes for industrial extension, training, introduction of improved appliances and techniques have been expanded by the All-India Boards including the Central Small Industries Organisation and also the State Governments. There was a further increase in the number of industrial cooperatives. A number of Rural Industries Projects were taken up. The sales rebate in the case of silk and woollen khadi has been reduced and, in the case of certain village industries, has been replaced by tapering management grants. A proposal for the replacement of sales rebate in respect of cotton khadi by a weaving subsidy is now under consideration.

3. *Progress of expenditure.*—Industry-wise break-up of the Third Plan provision along with the estimated expenditure in 1961-62 and 1962-63 and the budget estimates for 1963-64 is shown below :

(Rs. crores)

Industry	Third Plan (Provisions)	1961-62 (Estimated expenditure)	1962-63 (Estimated expenditure)	1963-64 (Budget estimates)	1961-64 Total	1961-64 As %age of col. 2.
1	2	3	4	5	6	7
Handloom Industry (including powerlooms)	38·00	5·78	5·34	4·73	15·85	41·8
Khadi and village industries	92·40	16·19	19·31	16·45	51·95	56·1
Sericulture	7·00	0·75	1·08	1·10	2·93	41·8
Coir Industry	3·15	0·26	0·40	0·39	1·05	33·0
Handicrafts	8·60	0·90	1·03	1·121	3·14	36·5
Small scale industries	84·60	10·95	12·29	13·49	36·73	43·4
Industrial estates ..	30·20	3·25	4·76	5·98	13·99	46·3
	263·95	38·08	44·21	43·35	125·64	47·6

The total outlay during the first three years of the plan period is expected to be less than 50 per cent of the total Third Plan provision of Rs. 264 crores. On the whole, the total outlay during the entire Third Plan period is likely to be about Rs. 235 crores and, thus, fall short of the Plan provision by about Rs. 25—30 crores.

4. In addition to the Plan provisions, a sum of Rs. 0.25 lakh was provided for each of the 45 Rural Industries Projects for 1962-63 mainly for the appointment of staff and for carrying out regional surveys. A provision of Rs. 1·5 crores (Rs. 3·0 lakhs for each project) has been made for 1963-64. Further, an expenditure of about Rs. 9 crores is expected to be incurred during 1961-64, out of the provision of about Rs. 20 crores for the development of these industries under the programme of community development.

5. *Production Targets.*—The development programmes for different village and small industries consist mostly of programmes of financial, technical and other assistance and no firm production targets were envisaged, except for a target of about 23 lakh kgs of mulberry and non-mulberry silk. An estimated output of 160 million yards of khadi had also been indicated in the Plan. The Handloom Board has provisionally fixed a production target of 2,800 million yards. Besides, 300 new industrial estates were also envisaged to be set up during the Third Plan period, excluding 66 estates set up during the Second Plan period. The physical achievements during the first two years of the plan period in relation to the position in 1960-61 are indicated below :

	Unit	1960-61	1961-62	1962-63
Handloom cloth	million yards	1,930	2,244	2,250
Khadi	,,	64·8	76·2	N.A.
Sericulture	lakh kgs.	15·0*	16·6*	17·8*
Industrial estates	number	66	89@	105@

6. *Credit and finance.*—Nearly Rs. 7 crores were sanctioned as loans during the first two years of the Third Plan period by the State Governments and Union Territories under their State Aid to Industries Acts/Rules. Since the beginning of the Third Plan period, the State Financial Corporations have advanced loans from their own funds amounting to about Rs. 3.43 crores by the end of December 1962. The credit limit sanctioned by the State Bank of India increased from Rs. 8·85 crores at the end of March 1961 to Rs. 13·02 crores by the end of March 1963. Under the credit guarantee scheme of the Reserve Bank which has recently been extended to cover the entire country, guarantees for loans amounting to about Rs. 17·4 crores had been issued by the end of April 1963, as

*Figures relate to calendar years.

@Including estates set up during the Second Plan period.

against about Rs. 8·19 crores by the end of April 1962 and Rs. 2·06 crores by the end of April 1961. The Reserve Bank also continued to provide credit facilities to the central cooperative agencies for meeting the working capital requirements of the handloom weavers' societies and credit limit amounting to Rs. 4·34 crores had been sanctioned for 1962-63, as against Rs. 3·69 crores for 1961-62.

7. *Industrial Cooperatives.*—As a result of the financial and other types of assistance provided to industrial cooperatives their number increased from 33,256 in 1961 to 35,700 at the end of June 1962. During this period, the membership increased from 25·57 lakhs to 26·32 lakhs and the working capital from Rs. 49·5 crores to Rs. 51·87 crores. A Working Group on Industrial Cooperatives which was appointed in September 1962 to review the present position, to recommend special programmes and physical targets during the Third Plan period and to indicate lines of development in the Fourth Plan period, has recently submitted its report which is under consideration.

8. *Rural Industries Projects.*—A notable development has been the constitution of a high-level Rural Industries Planning Committee to review the progress of industries in rural areas, advise on problems of policy and planning relating to them and recommend programmes for their intensive development in rural areas including coordinated area and regional plans of development and pilot projects. In pursuance of the Committee's recommendations, 45 Rural Industries Projects have been taken up in selected rural areas in different States and certain Union Territories so that effective techniques, methods and programmes could be evolved and extended progressively to other areas which have a large incidence of unemployment and under-employment. Each Project area generally covers a population of 3—5 lakhs and consists of three to five complete development blocks. Rapid surveys of 40 of the Project areas have already been completed and development programmes are now being formulated. The object of these programmes is to promote industries based largely on agriculture and other local resources with a view to broadening and diversifying the base of the rural economy. The progress of the programme was recently reviewed in a Conference of the States' Chief Ministers and the Ministers of Industries and certain guidelines for the future have been laid down.

9. *Handloom and Powerloom Industries.*—Production of handloom cloth is estimated to have increased from 1,930 million yards in 1960-61 to 2,250 million yards in 1962-63. A target of about 2,452 million yards has tentatively been fixed by the Handloom Board for 1963-64 and 2,800 million yards by 1965-66. It is likely that the production at the end of the Plan period may fall short of the target by about 100—150 million yards. Some of the more important reasons for the probable shortfall are difficulties experienced in obtaining regular and adequate supplies of the types of

yarn required by handlooms, lack of adequate attention to introduction of technical improvements and also inadequate flow of financial assistance for working capital requirements through the central cooperative agencies. The value of exports of cotton handloom cloth increased from about Rs. 5·0 crores in 1961-62 to about Rs. 6·7 crores in 1962-63.

10. A special Enquiry Committee was set up early in 1963 to review the progress of the powerloom industry and to formulate proposals for the Fourth Plan. The report of the Committee is expected to be available by the end of this year.

11. *Khadi.*—Against the estimated output of 160 million yards envisaged at the end of the Third Plan period, the total production of different varieties of khadi increased from about 65 million yards in 1960-61 to about 76 million yards in 1961-62. Information is not available about production in 1962-63. The principal reason for the slow progress is the time taken in reorganising the programme which involved selection of "gram ekais", modification of the training programmes, etc. Besides provision of equipment, paucity of trained follow-up service personnel also hampered progress. In view of these difficulties which would necessarily involve some more time, production by the end of the Third Plan is not expected to be higher than 100—110 million yards. Special steps have been taken by the Khadi Commission to increase the production of woollen blankets to meet defence requirements.

12. *Village Industries.*—Owing to the time taken in the organisation of "gram ekais" referred to earlier, the programmes for the development of various village industries also made slow progress. While production of village leather, cottage match and hand-made paper industries *at the centres assisted by the Khadi and Village Industries Commission* showed a sizeable increase, production of other village industries (with the exception of village oil, gur and khandsari where production showed a decline) registered relatively a marginal increase. Progress during the remaining years of the Plan period is expected to be faster. To meet defence requirements, steps have been taken by the Khadi and Village Industries Commission to step up the production of leather boots, soap and oil.

13. *Sericulture.*—Production of both mulberry and non-mulberry silk increased from about 15 lakh kgs in 1960 to about 17·8 lakh kgs in 1962. On a rough assessment, production by the end of the Third Plan period may fall short of the target of about 23 lakh kgs. by about 2 lakh kgs., but it should be possible by energetic efforts to achieve the target. The Central Silk Board and the States have been able to build up basic institutions for large-scale supply of tested seed for industrial rearing. The value of total exports of mulberry and non-mulberry silk fabrics and silk waste increased from Rs. 1·52 crores in 1961 to Rs. 1·82 crores in 1962. A short-term

programme was drawn up by the Board for production of better qualities of silk to serve defence needs on a priority basis.

14. *Coir Industry.*—During the years 1959-60 to 1962-63, the total number of coir spinning units increased from about 18,000 to 27,000 and the number of industrial establishments manufacturing mats and mattings from 922 to 1,831. During this period, the turn-over in the Coir Board's show rooms and sales depots in important cities also rose from Rs. 3·5 lakhs to Rs. 6.3 lakhs. There was an improvement in the total exports of coir fibre, yarn and manufactures, the value of which increased from about Rs. 8·67 crores in 1960-61 to about Rs. 11·35 crores in 1961-62 and Rs. 12·23 crores in 1962-63.

15. *Handicrafts.*—With the availability of detailed information regarding exports, it is now estimated that exports of handicrafts including jewellery, precious stones and carpets amounted to Rs. 19·35 crores during 1961-62 and Rs. 21·53 crores in 1962-63. The internal sales through the Government assisted and the State emporia which amounted to about Rs. 2·45 crores in 1961-62, are expected to be of the order of Rs. 3 crores in 1962-63. According to the Handicrafts Board, the provision made in the Plan for the Central schemes has proved inadequate. In view of the appreciable export potential of handicraft industries and the further scope for enlarging internal sales, it is proposed to provide additional funds for certain important programmes like supply of improved tools, preparation of new designs, etc. Shortage of certain raw materials particularly non-ferrous metals, paucity of trained personnel and difficulties in marketing of products are stated to be some of the other important difficulties being experienced at present.

16. *Small Scale Industries.*—Against 1,190 machines supplied on hire-purchase terms by the National Small Industries Corporation in 1960-61, 1,410 were supplied in 1961-62 and 2,755 in 1962-63. The number of items reserved for exclusive purchase from small scale units increased from 27 in 1958 to 63 by the end of March 1963. The value of purchases by the Central Government Departments including the Railways from small industries has increased from Rs. 6·5 crores in 1960-61 to Rs. 11.7 crores in 1961-62 and to about Rs. 30·2 crores in 1962-63. Of these, the value of contracts secured by small units with the assistance of the Corporation increased from Rs. 3·9 crores in 1960-61 to Rs. 7·9 crores in 1961-62 and Rs. 14·5 crores in 1962-63. Special steps were taken by the Central Small Industries Organisation to assist small scale industries to meet a number of defence requirements. A list of about 400 items of interest to small scale units has been compiled and circulated to the States' Industries Departments. Arrangements have also been made to make available specifications and drawings of items required for defence.

17. There has been an impressive growth of variety of engineering and non-engineering small scale industries over the last few years including those requiring higher technology and skills, some of which are also being manufactured in the large-scale sector. Some of the items taken up for production during the Third Plan period by new small scale units include refrigerators, air-conditioners and allied equipment; electric stoves; postal franking machines; parts and components of the automobile industry; certain electronic instrument; time-pieces; hearing aids; typewriters; etc. Certain items of the plastic industry have been reserved for exclusive development in the small-scale sector. Production of pesticides and also certain varieties of dyestuffs has registered a sizeable increase. The products of a number of small scale industries have been competing successfully with those of large industries, despite shortage of raw materials. The programme of assistance does not involve any appreciable element of subsidy. It is estimated that, on the whole the supplies of available imported raw materials as also certain indigenous raw materials in short supply, have not been sufficient even to meet 50 per cent of the small scale industries' requirements. Some of the State Governments have also been experiencing difficulties owing to shortage of technical personnel and power and, in marketing of some products owing to the competition from large industries. The programme of development has recently been reviewed by an international study team and its report is now under consideration.

18. *Industrial Estates.*—During the Second Plan period, 119 schemes for industrial estates were sanctioned of which about 66 were completed and the remaining 53 schemes carried out to the Third Plan. In the Third Plan, it was envisaged that 300 *new* industrial estates would be set up. During the first two years of the Third Plan period, 137 *new* schemes have been sanctioned. During the first two years of the Third Plan period, out of the spill-over and new schemes, 39 industrial estates had been completed and 27 were under construction.

19. A review of this programme showed that there had been delays in the allotment of sheds after they had been completed, occupation of the sheds after they had been allotted and commencement of full production after occupation. The main reason for this position varied from State to State but the most common reason was shortage of raw materials. Most of the State Governments are, however, adhering to their original programmes in the hope that conditions in respect of raw materials as well as construction materials would ease in the coming years. But some of the States are considering adjustments in the programmes by either curtailing the number of rural industrial estates or reducing the number of sheds to be constructed in the estates, or both. A review of the working of the industrial estates shows that in some cases adequate care and attention have not been paid to proper planning and location. State Governments have

been requested to review all cases where effective steps have not been taken for construction so far and ensure that estates are located in places which have the essential facilities for the success of the scheme. It is likely that the total number of *new* estates to be completed by the end of the Third Plan period may be about 200, including the estates to be set up by industrial cooperatives and joint stock companies with financial assistance from the Life Insurance Corporation.

CHAPTER XI

INDUSTRIES

THE development programme for industries and minerals envisaged in the Third Plan was estimated to require an investment of Rs. 2,993 crores; in addition an outlay of Rs. 150 crores was envisaged for replacement and modernisation. The details are as under :

(Rs. crores)

	Public sector		Private sector		Public and Private sectors	
	Total	Foreign exchange	Total	Foreign exchange	Total	Foreign exchange
(a) new investment						
(i) mineral development	478	200	60	28	538	228
(ii) industrial development .	1,330	660	1,125	450	2,455	1,110
TOTAL ..	1,808	860	1,185	478	2,993	1,338
(b) Replacement ..		—	150	50	150	50

2. As against the estimated investment requirements of Rs. 1,808 crores for the programmes in the public sector, the provision made in the Plan for industries and minerals was Rs. 1,520 crores; *i.e.* about Rs. 300 crores less than the requirements.

When the Third Plan was prepared, estimates of the cost of certain projects had not been made and such preliminary indication of casts as could be had was taken into account. Estimates of costs have now been made on receipt of more detailed information on the basis of project reports. There has also been a general increase in construction costs. Moreover, in some cases the scope of the projects was enlarged. The present indications of the cost of industrial and mineral programmes are compared with the previous ones below :

(Rs. crores)

	Previously	As at present
Industrial development	1,330	1,630
Minerals	478	662
TOTAL ..	1,808	2,292

3. It is estimated that the public sector investment during the current plan period would be about Rs. 1,225 crores under Industries and Rs. 529 crores under minerals. Thus financial provision made in the Plan would be exceeded though on account of the increase in the costs there will be a larger spillover in the Fourth Plan than earlier visualised.

On the basis of the estimated outlay of Rs. 1,754 crores under Industries and Minerals there would be spillover of about Rs. 405 crores under the industries sector and about Rs. 133 crores under the minerals sector.

4. Programmes in the private sector were estimated to cost approximately Rs. 1,335 crores including Rs. 150 crores for modernisation. Targets in respect of certain industries have subsequently been revised. The content and priorities of the private sector programme have also undergone some change. It is difficult to estimate the revised cost of the numerous programmes in the private sector; the indications are that, their costs have increased over the original estimate.

5. *Production Trend.*—Industrial production in the first two years of the Plan recorded moderate increases over the preceding years. It showed an increase, as represented by the index, of 6.5% in 1961-62 and 8.0% in 1962-63 (base year—1956) as against an average increase of 11% (base year—1950-51) envisaged in the Third Plan. This performance has to be viewed in the context of the strains experienced in the economy during this period when apart from foreign exchange shortage for import of raw materials, intermediates and components, the industry faced difficulties of power shortage in certain regions, and transport and coal shortage. Whereas there has been no perceptible improvement in foreign exchange availability, the situation in regard to power, transport and coal improved considerably towards the end of 1962 and this improvement has been maintained during the current year.

6. A special feature of the increase in industrial output during the first two years was the significantly larger growth of the producer and basic industries as compared to the general index of industrial production. Thus for example, compared to the level of production in 1960, the output in basic metal industry increased by 26%, the manufacture of metal products by 69%, manufacture of machinery by 20—22% and chemical and chemical products by 23%. On the other hand, the increase in consumer industries was much lower—the increase in cotton textiles being 6·5% and in paper 9·9%. The industries in which considerable increase in production was achieved are steel, aluminium, machine tools, electric transformers, fertilisers and caustic soda. The following table indicates the production in the first two years in respect of some of the important industries and the percentage increase over the last year of the Second Plan.

Capacity and Production in Selected Industries

	Unit	1960-61		1961-62		Percentage increase in production over 1960-61	1962-63		Percentage increase in production 1962-63 over 1960-61
		Cap.	Prod.	Cap.	Prod.		Cap.	Prod.	
	1	2	3	4	5	6	7	8	9
1 Steel ingots	Million tons	6·0	3·3	6·0	4·27	29	6·0	5·39	63
2 Aluminium	000 tons	18·1	18·2	27·5	19·4	7	53·35	42·0	130
3 Steel Castings	,,	39·0	34·0	43·5	40·0	18	52·2	43·5	28
4 Steel Forgings	,,	43·0	35·0	48·0	48·0	37	56·6	53·0	51
5 Machine Tools..	Rs. crores	8·0	7·24	8·9	8·50	17	11·3	11·48	58
6 Automobiles	000 nos.	53·7	52·1	53·7	54·6	5	53·7	54·0	4
7 Electric Transformers (33 KV & below)	Million KVA	1·4	1·39	1·5	1·98	43	1·96	2·4	72
8 Nitorgenous Fertilisers	000 tons of N	158·3	97·2	238·4	140·0	44	386·6	175·2	80
9 Caustic Soda	000 tons.	124·0	97	126·6	120·8	24	126·6	125·5	40
10 Paper and Paper board	,,	410	343	410	365	6	483	393·3	14
11 Cement	Million tons	9·2	7·8	9·7	8·2	5	9·7	8·8	13
12 Jute	000 tons	1·2	1·0	1·2	1·05	5	1·2	1·1	10
13. Cotton Textiles (Mill sector)—									
(*a*) Yarn	Mill. lbs.	12·7 (a)	1,737 (c)	13·8 (a)	1,906	9	13·9 (a)	1.884·6	8
(*b*) Cloth	Mill yds.	1·99 (b)	5,048	1·99 (b)	5,100	1	2·0 (b)	4.921	—3
14 Sugar	Million tons	2·25	3·0	2·25	2·7	—10	2·67	2·3	—23

(a) Million active spindles.
(b) Lakh looms.
(c) Relates to calendar year.

7. *Public Sector.*—The outlay on industrial programmes of the Central Government amounted to about Rs. 116 crores in 1961-62 and the anticipated expenditure in 1962-63 is of the order of Rs. 155 crores. In the third year of the Plan, the outlay is expected to be stepped up to about Rs. 285 crores. Thus in the first three years of the Plan the total outlay would amount to about Rs. 556 crores.

The projects accounting for the bulk of the outlay are the three steel plants, the machinery projects under the Heavy Engineering Corporation, the Bhopal Heavy Electrical Project and the fertiliser factories at Trombay, Nahorkatiya and Gorakhpur.

As expenditure of the order of Rs. 600 crores is expected to be incurred during the next two years, the total investment in the central projects in the Third Plan period would thus amount to about Rs. 1,150 crores. Including the expenditure on State schemes, the overall outlay in the public sector is expected to amount to Rs. 1,225 crores. There would, however, be a spillover in the industries sector of about Rs. 405 crores into the Fourth Plan.

8. The construction in the three Hindustan Steel Plants included in the Second Plan was virtually completed by 1961-62. In Bhilai all the units were completed by February, 1961. Certain units in Durgapur and Rourkela were commissioned in 1962-63. There has been steady improvement in the production from these units. Bhilai exceeded its production target in 1962-63; in Rourkela and Durgapur the target was reached towards the end of 1962-63. The production from the three steel plants during the first two years of the Third Plan was as follows :

(in 000 tonnes)

	1961—62			1962—63		
	Bhilai	Rourkela	Durgapur	Bhilai	Rourkela	Durgapur
Total pig iron ..	1,000	434	728	1,170	732	1,056
Pig iron for sale ..	375	67	282	341	81	391
Steel ingots	789	354	463	1,060	702	731
Saleable steel	532	214	214	793	490	499

9. There has been some delay in proceeding with the expansion of the three steel plants. Orders for plant and equipment for the Bhilai expansion were expected to be placed by March 1961 and for the Rourkela and Durgapur expansions a year later. Orders in respect of Bhilai were placed in February 1962. In the case of Rourkela, the agreement in respect of credit was signed in March 1963. Letters of indent for all the plant and machinery have been issued. In the case of Durgapur the bulk of orders have been placed recently.

As regards the Bokaro Steel Plant, a detailed project report has been obtained from a firm of Indian Consultants and is under scrutiny. Land acquisition, development of raw materials and water resources have been taken in hand. It is hoped that sufficient advance will be made on this project before the end of the Plan period.

In the above circumstances, the realisation of the steel target will be appreciably affected.

10. In the case of the Alloy and Tool Steel Plant, Durgapur, negotiations are in progress with Japan for placing orders. The implementation of this project has been delayed and it is now expected to go into production towards the close of 1965-66.

11. The implementation of projects under the Heavy Engineering Corporation has shown satisfactory progress. The construction of Heavy Machine Building Plant and the Foundry/Forge has commenced. Construction of the Coal Mining Machinery project at Durgapur is in progress. Equipment and machinery have started arriving. As regards the Heavy Machine Tool Project, orders are expected to be placed shortly.

12. The expansion of Hindustan Machine Tools, Bangalore was completed in 1961-62. The third machine tool factory at Pinjore is about to be commissioned. The construction of the fourth factory in Kerala has been sanctioned and work on the project is expected to commence shortly.

13. The Heavy Electrical Project, Bhopal which went into production in July 1960 has increased the volume of production and taken up new items of manufacture during 1963-64. Production is likely to reach Rs. 8 crores as compared to the output of Rs. 6 crores envisaged in the original Project Report.

The Project Report on the Ranipur Heavy Electrical project has been approved. The contract will be finalised soon.

Preliminary construction work has started at the High Pressure Boiler Plant at Tiruchirapalli and a training class for artisans has commenced. The scope of the Heavy Electrical Project at Ramachandrapuram has been finalised and construction work has commenced. In the case of both the Tiruchirapalli and Ramachandrapuram projects, contract for plant and equipment has been finalised.

14. The Rourkela Fertiliser Factory has commenced production and part of the expansion programme of the fertiliser factory at Alwaye has been completed. In the case of Trombay fertilisers orders for all the major items of plant and equipment have been placed and the unit is expected to go into production in 1964-65. The construction of the Nahorkatiya Fertiliser

Factory received a set-back due to the dislocation of work as a result of the emergency. There was some delay in concluding the contracts for the Gorakhpur Fertiliser Factory as the final selection of the site took some time. As regards the fertiliser factory in Madhya Pradesh, following the surrender of the licence by the private party, it was decided that it should be set up in the public sector. The factory will be located at Korba.

15. The Phyto-Chemicals Project was approved in principle to be financed under the U.S.S.R. credit and a detailed project report was prepared. The study of this report indicated that cost of production would be uneconomic because of the high price of tea waste. The question whether it should be implemented in its present form or modified is therefore being considered.

16. The Organic Intermediates Chemical Project was held up for a considerable time due to difficulties of foreign exchange. Meanwhile technical developments since the project was conceived have been such that doubts have been raised as to whether it would be economic. The matter is being studied further.

17. The Ophthalmic Glass project was cleared only recently after a careful review of the estimated demand.

18. Another project which has not registered any progress is the Heavy Plate and Vessel and Heavy Structural Works. It was not found possible to accommodate this project with the amount available in the U.K. credit. Efforts are being made to take up the project for phased implementation with alternative sources of foreign exchange.

19. The Ball and Roller Bearings project, Heavy Compressors project and the second Heavy Plate and Vessel Works are not likely to be completed during the Third Plan. In regard to the Compressor and Pumps project, the techno-economic report prepared by the Russians has been examined and it is now proposed to ask for a detailed project report. In the case of the Ball and Roller Bearings project the U.S.S.R. authorities have been requested to prepare a techno-economic report.

20. In the preceding paragraphs reference has been made to delays in the implementation of projects. The progressing of projects could be speeded up if adequate care is taken initially to plan the project in sufficient detail, to define its scope (and adhere to it), to estimate the cost and foreign exchange requirements with sufficient degree of precision and to lay down realistic schedules of implementation. The lack of adequate preparatory planning has largely contributed to the delay in the implementation of certain projects in the public sector for which even foreign exchange credit was available. In order that planning of projects is done in sufficient detail, it appears necessary to set up appropriate planning units in the Ministries and design and technical organisations in major public sector undertakings.

These suggestions are currently under examination in consultation with the Ministries.

21. *Private Sector.*—Generally speaking conditions were favourable in the first two years of the Third Plan for industrial investment. By the end of 1961-62 industrial licences had been issued covering the entire targetted capacity of a large number of industries. The approval given by the Capital Goods Committee for import of capital equipment in the first two years of the Plan amounted to Rs. 340 crores.

After approval in principle by the Capital Goods Committee private parties have to undertake detailed negotiations with the aiding institutions to obtain their approval for sanction of foreign exchange loans and also conclude negotiations with foreign collaborators. Though the foreign exchange clearance by the Capital Goods Committee in the first two years would appear to be substantial, there will be considerable lag before these approvals materialise in imports of equipment.

On the basis of the foreign exchange approvals given till the end of March 1963, capacity targets in several industries will only be partially covered. Further foreign exchange approvals of the order of Rs. 250 crores will be needed to cover the Third Plan targets. However, considering the time lag between approval in principle of foreign exchange and the actual establishment of capacity, there will be shortfall in the fulfilment of targets for a number of industries even if it were possible for the Capital Goods Committee to give approvals to the full extent of the targetted capacity in the near future.

22. Progress in a number of industries, in the private sector has not been satisfactory. There will be shortfalls in the achievement of targets in several important industries such as alloy tool and stainless steel, aluminium (in relation to the revised target), steel castings, steel forgings, machine tools, winding wires, cement, fertilisers sulphuric acid, soda ash, paper and paperboard, newsprint, rayon grade pulp and synthetic rubber. The factors responsible for the slow progress in these industries are under study.

23. *Review of important industries.*—On the basis of the progress made so far, the capacity and production targets expected to be realised by the end of the Third Plan period are indicated in Annexure. The position in regard to some of the important industries is discussed below :

(i) *Iron and Steel.*—Against the target of 6·8 million tons of finished steel it is anticipated that the output would be of the order of 5·8 million tons in 1965-66. The delays in the expansion of the three steel plants and in the establishment of Bokaro steel plant account for this shortfall. The targetted production of 6.8 million tons is now expected to be realised by the third year of the Fourth Five Year Plan.

A programme intended to enable the Tata Iron & Steel Company to remove some of the technical defects and to achieve their full rated capacity of 2 million tons, has recently been approved in principle. The proposal of the Indian Iron & Steel Company to expand their capacity to 1·3 million tons of ingots has also been accepted. The foreign exchange requirements of these programmes are expected to be provided by the World Bank.

The production of pig iron for foundaries is currently of the order of 1 million ton. On account of the delay in the implementation of schemes licensed in the private sector, the output in 1965-66 is expected to be only 1·2 million tons against the target of 1·5 million tons. This would result in considerable shortage of pig iron as the demand is expected to be of the order of 2 million tons in 1965-66. Various steps for installing additional capacity for pig iron are under consideration.

No substantial output of alloy and tool steels would be available during the Third Plan period. However, the position would considerably improve in the early Fourth Plan period with the commissioning of the Alloy Tool Steel Plants at Durgapur and at Bhadravathi. Some output from private sector projects is also likely to be available.

(ii) *Aluminium.*—Against the capacity target of 87,500 tons the capacity available by the end of the Third Plan period is likely to be about 68,000 tons. However, with the completion of the expansion of the aluminium plant of the Hindustan Aluminium Corporation, Renukoot, the capacity would increase to about 100,000 tons in the first year of the Fourth Plan. The entrepreneurs who were to set up aluminium factories at Koyna and Sharavathi have not been able to make progress. Efforts are being made to implement these schemes expeditiously. These projects, as well as, the public sector project in Madhya Pradesh are likely to materialise only in the Fourth Plan period.

(iii) *Industrial Machinery.*—The Heavy Machine Building project at Ranchi will go into initial production in the latter half of 1963-64. The production programme of this factory for the next years is being worked out. The Coal Mining Machinery project is expected to go into initial production in 1964-65. Full output may be expected by the middle of the Fourth Plan period. The output from the Heavy Electrical Factory at Bhopal in 1965-66 is envisaged at about Rs. 20 crores. However, this would be substantially stepped up in the early years of the Fourth Five Year Plan. The Heavy Electrical Project at Ranipur and Ramachandrapuram and the High Pressure Boiler Plant are expected to be commissioned towards the end of the Third Plan.

The production of high pressure boilers envisaged at 240 MW in 1966-67 will increase to about 1000 MW by 1970-71. The full production of power transformers of 3 million KVA is expected to be reached by 1966-67.

The capacity targets for machinery required by cotton textile, sugar, cement and paper industries are expected to be more or less achieved. There is, however, likely to be shortfall in certain items such as rayon machinery, cranes, structural fabrication, etc.

Against the target of Rs. 30 crores of machine tools envisaged in the Plan, the output is now expected to be about Rs. 25 crores. The output in the public sector would be of the order of Rs. 11 crores largely contributed by the Hindustan Machine Tools. The Heavy Machine Tool Factory at Ranchi is expected to go into trial production in 1965-66.

(iv) *Automobiles.*—Against the target of 1 lakh vehicles (30,000 passenger cars, 60,000 commercial vehicles and 10,000 jeeps), the output in 1965-66 is expected to be 89,000. The output of commercial vehicles in 1965-66 is likely to be 54,000. With the completion of the expansion programmes including the manufacture of engines already approved, an output of 60,000 may be expected in the first year of the Fourth Plan.

On the basis of the foreign exchange releases made, it should be possible to achieve by 1965-66 the indigenous content of 90% envisaged in the Plan.

(v) *Fertilisers.*—Though schemes with a total capacity of the order of 1·388 million tons have been approved, the production target of 800,000 tons for nitrogenous fertilisers is not likely to be achieved mainly on account of the slow progress in the implementation of private sector schemes. It is estimated that capacity of the order of 640,000 tons will be achieved by the end of the Third Plan period. Actual production in 1965-66 may, however, amount to only 500,000 tons since some of the new units will be commissioned in the latter half of the year and would not be in operation for the whole year.

The output in the initial years of the Fourth Plan is expected to rise to 700,000 tons in 1966-67 and 900,000 tons in 1967-68. The projects envisaged to be completed in the early years of the Fourth Plan are the fertiliser factories at Kothagudiam and Visakhapatnam in the private sector and the factories at Gorakhpur and Korba in the public sector.

(vi) *Paper and Paperboard.*—Against the targeted output of 700,000 tons of paper and paperboard, production is now anticipated at 580,000 tons in 1965-66. Schemes amounting to about a million tons have been licensed and some of them would materialise in the early years of the Fourth Plan period. The shortfall in the case of newsprint would be larger since none of the schemes licensed in the private sector has so far made any worthwhile progress. Efforts are being made to expedite the expansion of NEPA mills. If this expansion programme is completed by 1965-66 the output in that year may be 60,000 tons as against the target of 120,000 tons.

(vii) *Cement*.—A shortfall of about 1 million tons in the output target for cement is likely; the production in 1965-66 is now being estimated at 12 million tons. Steps have been taken to expedite the installation of further capacity so that additional output may become available in the early years of the Fourth Plan.

24. *Overall position as at the end of the Third Plan*.—The targets in several industries would be fulfilled or at any rate considerable advance made by the end of the Third Plan period, *e.g.* textile machinery, sugar machinery, cement machinery, paper machinery, A.C.S.R. conductors, inorganic heavy chemicals, etc. There will, however, be shortfalls in certain crucial sectors. As a result the full benefits from the programmes envisaged in the Third Plan would be available only after a year or two and the Fourth Plan will start at a comparatively lower base than originally envisaged.

ANNEXURE

Selected physical targets and achievements

Sl. No.	Industry	Unit	1960-61		1961-62		1962-63		1963-64 Programmed		Third Plan 1965—66 Targets		Third Plan 1965—66 Likely Achievements	
			Installed capacity	Production	Installed capacity	Production	Installed capacity	Production	Installed capacity	Production	Capacity	Production	Capacity	Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	*Iron & Steel*													
	(*a*) Steel ingots	Mill tons	6·0	3·3	6·0	4·27	6·0	5·39	6·0	5·74	10·2	9·2	9·2	7·8
	(*b*) Saleable steel	,,	4·5	2·4	4·5	2·9	4·5	4·0	4·5	4·3	7·5	6·8	6·5	5·8
	(*c*) Pig iron for sale	,,	1·1	1·1	1·1	0·97	1·1	1·06	1·1	1·06	1·5	1·5	1·2	1·2
2	Alloy, tool and stainless steel finished)	000 tons	—	—	—	—	—	—	—	—	200	200	50	50
3	Ferro-manganese	,,	157·8	89·3	157·8	103·5(*c*)	157·8	108·0	157·8	140	220	220	220	200
4	Aluminium	,,	18·1	18·2	27·5	19·4	53·35	41·97	53·35	50·0	87·5*	80·0	68·85	68·0
5	*Non Ferrous Metals*													
	(*a*) Copper	,,	8·8	8·8	9·0	9·0	9·0	9·48	9·0	9·5	22·0	20·0	17·4	17·4
	(*b*) Zinc	,,	—	—	—	—	—	—	—	—	15·0	15·0	18·0	18·0
	(*c*) Lead	,,	6·0	3·7	6·0	3·15	6·0	3·37	6·0	4·0	8·5	8·0	9·0	9·0
6	Cast iron pipes	,,	270	209 (*c*)	270	229·5 (*c*)	270	230(*b*)	350	250	800	800	600	550
	Steel wire ropes	,,	6·1	3·3(*c*)	6·27	2·55	15·0	4·8(*b*)	20·0	10·0	40	40	32	25
8	*Castings and Forgings*													
	(*a*) Steel castings	,,	39·0	34·0	43·5	40·0	52·2	43·57	70·0	50·0	200	200	150	150
	(*b*) Steel forgings	,,	43·0	35·0	48·0	48·0(*b*)	56·6	53·0	75·0	58·0	200	200	150	150
9	*Industrial Machinery*													
	(*a*) Sugar mill machinery ..	Rs. crores	11·6	4·2(*c*)	11·6	4·6(*c*)	15	6·42	15	10	15 to 16	14	15	14
	(*b*) Cotton textile machinery	,,	12·0	10·4(*c*)	12·5	12·5	13·0	13·0 (*b*)	15·0	15·0	22·0	20·0	22·0	20·0
	(*c*) Cement machinery	,,	1·1	0·6(*c*)	4·5	4·9(*c*)	5·25	0·7(*b*)	5·25	1·2	4·5	4·5	8·0	4·5
	(*d*) Paper machinery ..	,,	neg.	neg.	1·1	0·4(*c*)	0·9	0·85(*b*)	4·9	2·0	8·5	6·5 to 7·0	6·5	6·5 to 7·0
10	Machine tools	,,	8·0	7·24	8·92	8·5	11·3	11·48	18·0	14·5	30·0	30·0	30·0	25·0
11	Road rollers	Number	464	388(*c*)	464	564	694	668	800	700	800	700	1,094	1,000
12	Boilers	Rs. crores	3·7	0·53(*c*)	3·7	1·07	8·50	2·17	10·00	5·0	29.0	25·0	12·17	1·20

Sl. No.	Industry	Unit	1960-61 Installed capacity	1960-61 Production	1961-62 Installed capacity	1961-62 Production	1962-63 Installed capacity	1962-63 Production	1963-64 Programmed Installed capacity	1963-64 Programmed Production	Third Plan 1965-66 Targets Capacity	Third Plan 1965-66 Targets Production	Third Plan 1965-66 Likely Achievements Capacity	Third Plan 1965-66 Likely Achievements Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
13	*Railway Rolling Stock*													
	(*a*) Locomotives	Number	300	1,129(g)	300	248	300	246	300	250	360	1,470 (g)	360	1,470(g)
	(*b*) Wagons (in terms of four wheelers)	„	26,000	69,130(g)	26,000(*e*)	19,164	26,000(*e*)	25,969	38,500	32,000	33,500	117,144(g)	40,000	157,133(g)
	(*c*) Passenger coaches ..	„	1,800	7,332(g)	1,1800	1,610	1,800	1,849	1,800	1,850	1,900	7,879(g)	1,900	7,879(g)
14	*Automobile & Ancillary Industries*													
	(*a*) Passenger cars	000 Nos	20·2	19·1 (*c*)	20·2	21·78	20·2	20·84	20·2	21·0	30·0	30·0	30·0	25·0
	(*b*) Commercial vehicles	„	28·0	27·5(*c*)	28·0	25·50	28·0	25·70	28·0	27·0	60·0	60·0	54·0	54·0
	(*c*) Jeeps & Station Wagons	„	5·5	5·5(*c*)	5·5	7·30	5·5	7·44	8·0	8·0	10·0	10·0	10·0	10·0
15	Motor cycles & scooters	„	23·0	17·6	24·0	19·13	30·0	23·62	36·0	30·0	48 to 60	50·0	55·0	45·0
16	Ball & Roller Bearings ..	Mill Nos	1·7	3·2	3·5	3·3	3·5	4·0	8·4	5·5	11·0	15·0(h)	12·0	15·0
17	*Agricultural Implements and Machinery*													
	(*a*) Power driven pumps ..	000 Nos	128·0	105·0	137·0	128·8	146·65	131·1	150·0	140·0	184·0	150·0	184·0	150·0
	(*b*) Diesel engines (stationary)	„	47·7	43·2	49·0	43·02	55·44	45·28	55·44	50·0	72·0	66·0	72·0	66·0
	(*c*) Tractors	„	neg.	neg.	5·5	0·88	7·5	1·6(b)	10·0	4·2	12·0	10·0	14·5	10·0
18	Bicycles	Mill Nos.	1·12	1·06	1·44	1·04	1·44	1·10	1·44	1·20	2·2(*i*)	2·0(*i*)	2·2	1·6
19	Sewing Machines ..	000 Nos	267·4	293·3	267·4	323·0	341·0	330·0	445·0	400·0	700	700(j)	600	600
20	*Coated Abrasives & Grinding wheels*													
	(*a*) Coated abrasives ..	000 reams	200	144·4	200·0	153·4	200	194·2	230	200	500	400	400	300
	(*b*) Grinding wheels ..	000 tons	2·89	2·04	3·13	1·96	3·13	2·32	3·13	2·80	6·5	5·4	4·5	4·0

21	*Clocks & Watches*													
	(*a*) Clocks	000 Nos	66·0	52·3(*c*)	88·0	53·5	132·0	64·0	132·0	70·0	200	200	132	80
	(*b*) Time-pieces	,,	60·0	neg.	210·0	46·4	210·0	121·2	210·0	140·0	1,200	1,200	1,200	500
	(*c*) Watches	,,	—	—	360·0	14·4	670	21·3	670	50	1,200	1,200	1,200	400
22	Electric Transformers 33 KV and below)	Mill KVA	1·40	1·39	1·50	1·98	1·96	2·40	1·96	2·5	4·0	3·5	4·0	3·5
23	Electric Motors (200 HP and below)	Mill HP	1·13	0·73	1·13	0·86	1·13	1·03	1·14	1·20	3·0(k)	2·5(k)	3·0	2·5
24	*Electric Cables an d Wires*													
	(*a*) A.C.S.R. conductors ..	000 tons	19·3	23·6	31·4	24·8	31·4	30·47	35·9	34·0	55(x)	44 (x)	68	55
	(*b*) VIR & PVC Cables ..	Mill Yards	463·2	214·2	487·2	243·0	529·2	306·7	550·0	350·0	800	600	800	600
	(*e*) Winding Wires ..	000 tons	6·8	4·6	7·4	5·64	7·49	6·71	9·05	8·0	32	24	15	12
	(*d*) Paperinsulated cables ..	Miles	884·0	620·0	884·0	884·0	884·0	1,336·0	1,028	1,50	4,500	4,000	5,000	4,500
25	Electric fans	Mill Nos	0·85	1·06	0·89	1·08	1·37	1·16	1·3	1·20	2·8	2·5	2.8	2·5
26	Electric Lamps—G.L.S. & others	Mill Nos.	47·6	41·8	47·6	46·6	62·6	58·29	69·3	66·0	76·0	68·0	7·74	78·0
27	Dry batteries	,,	224·5	214·2	224·4	206·9	224·5	251·15	224·5	260·0	400	350	329·5	325
28	Storage batteries	000 Nos	379·3	521·2	379·3	533·9	660·9	586·3	729·3	600·0	900	800	800	750
29	Radio receivers	,,	279	280	303·2	348·0	390·3	360·26	412·3	400·0	900	800	700	650
30	*Fertilisers*													
	(*a*) Nitrogenous (in terms of N)	000 tons	158·3	97·2	238·36	140·0	386·6	175·2	386·6	240·0	1,000	800	640	500
	(*b*) Phosphatic (in terms of P_2O_5	,,	57·3	53·0(*c*)	89·7	61·9	129·6	78·9	147·4	111·5	500	400	270	200
31	*Heavy chemicals*													
	(*a*) Sulphuric acid	,,	483·12	354·0	563·87	428·2	777·0	474·0	886·86	539·0	1,750	1,500	1,500	1,200
	(*b*) Soda ash	,,	268·0	145·0	268·0	177·9	268·0	229·9	323·30	284·0	530	450	400	350
	(*e*) Caustic soda	,,	124·0	97·0	126·6	120·8	126·6	125·5	230·28	210·7	400	340	400	
32	*Drugs and pharmaceuticals*													
	(*a*) Sulpha drugs	Tons	366	145(*c*)	399	156·0	399·0	196·3(*c*)	399·0	200·0	1,000	1,000	1,091	1,000
	(*b*) Penicillin	Mill Mega units	55·0	39·7(*c*)	65·0	50·18	65·0	62·3(*c*)	75·0	75·0	120	120	215	215
	(*e*) D.D.T.	Tons	2,800	2,786(*c*)	2,800	2,2768	2,800	2,568(*c*)	2,800	2,790	2,800	2,800	2,800	2,800
33	Plastics (polyethelene, P.V.C., etc.)	000 tons	15·5	9·5	22·3	14·7	25·7	19·0	38·0	24·0	85·0	74·0	73·8	69·5
34	Photographic film & paper	Mill. sq. meters	—	—	—	—	—	—	—	—	10·0	10·0	10·0	10·0
35	Paints and varnishes ..	000 tons	85·0	52·0	85·0	60·6	100·0	61·65	110·0	72·0	160·0	140·0	140·0	100·0
	Soap (Organised sector)—(m)	,,	250·0	140(*c*)	242·7	144·5	227·2	147·5	227·2	150·0	255·0	500	255·0	500·0

Sl. No.	Industry	Unit	1960-61 Installed capacity	1960-61 Production	1961-62 Installed capacity	1961-62 Production	1962-63 Installed capacity	1962-63 Production	1963-64 Programmed Installed capacity	1963-64 Programmed Production	Third Plan 1965—66 Targets Capacity	Third Plan 1965—66 Targets Production	Third Plan 1965—66 Likely Achievements Capacity	Third Plan 1965—66 Likely Achievements Production
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
37	*Starch and Glucose*													
	(*a*) Starch	000 tons	148·6	68·5	148·6	70·6(*c*)	148·6	75·3(*b*)	148·6	78·0	158·2	120·0	158·2	120·0
	(*b*) Liquid glucose	,,	12·9	8·7	18·45	10·4	18·45	9·72(*b*)	18·45	11·0	15·9	14·0	18·45	14·0
	(*c*) Dextrose powder	,,	4·3	2·6	5·67	2·94	5·40	2·78(*b*)	5·40	3·2	10·91	10·00	10·91	10·00
38	*Rubber manufactures*													
	(*a*) Automobile tyres ..	Mill. Nos.	1·61	1·49	1·87	1·59	2·4	1·76	3·06	2·5	3·7(*t*)	3·00(*tt*)	4·6	3·8
	(*b*) Bicycle tyres	,,	15·12	11·15	16·92	11·33	13·7(*d*)	12·42	15·33	14·0	38·6	30·9	20·0	18·0
39	*Paper and paperboard*													
	(*a*) Paper and paperboard	000 tons	410·0	343·0	410·0	365·0	483·0	393·2	538·4	425·0	820·0	700·0	680·0	580·0
	(*b*) Newsprint	,,	30·0	22·9	30·0	24·8	30·0	26·0	30·0	27·0	150·0	120·0	30·0	28·0
40	Cement	Mill. tons	9·2	7·8	9·7	8·2	9·7	8·8	10·4	9·3	15·0	13·0	13·5	12·0
41	Refractories	,,	0·82	0·55	0·83	0·6	0·84	0·66	1·13	0·9	2·0	1·5	1·4	1·1
42	Electric porcelain (L.T. & H.T. insulators)	000 tons	12·58	·25 (*c*)	13·40	8·16	13·40	9·25	22·60	17·60	30·0	24·0	30·0	24·0
43	Power and Industrial alcohol	Mill. gallons	40·1	20·4	45·2	32·9	45·8	37·5	57·7	33·3	72·0	60·0	72·0	60·0
44	*Cotton Textile*													
	(*a*) Yarn	Mill. lbs.	12·7(*a*)	1,737(*c*)	13·8(*a*)	1,900	13·9(*a*)	1,884·6	14·2(*a*)	2,000	16·5(*a*)	2,250	15·2(*a*)	2,175
	(*b*) Cloth	Mill yards	1·99 (w)	5,048	1·99 (w)	5,100	2·0 (w)	4,921·0	2·0 (w)	5,200	2·25 (w)	5,800	2·11 (w)	5,550
45	Jute	000 tons	1,200	1,022	1,200	1,050	1,200	1,175	1,200	1,190	1,200	1,300	1,209	1,300
46	*Rayon and synthetic fibres*													
	(*a*) Rayon filament ..	Mill. lbs.	52·3	47·0	69·6	52·9	76·7	65·0	76·7	75·0	140·0	140·0	110·0	110·0
	(*b*) Staple fibre	,,	48·0	48·0	56·0	61·4	56·0	71·5	56·0	72·0	75·0	75·0	60·5	75·0
	(*c*) Rayon grade pulp ..	000 tons	—	—	—	—	66	1·2(b)	42·6	20·0	100·0	90·0	67·8	58·0
47	*Woollen Textiles*													
	(*a*) Woollen and worsted yarn	Mill. lbs.	0·19 (*a*)	27·8(*c*)	0·19(*a*)	34·65	0·19(*a*)	43·1	0·19(*a*)	45·0	0·20(*a*)	52·0	0·20(*a*)	52·0
	(*b*) Woollen cloth ..	Mill. yards	48·0	15·3(*c*)	48·00	16·02	48·0	20·6	48·0	25·0	48·0	35·0	48·0	35·0

48	*Plywood including fibre board*													
	(a) Tea-chest	Mill. sq. feet	140·4	98·2	140·4	99·54	152·23	98·7	152·32	105·0	16 ·39	110·0	168·39	130·0
	(b) Commercial plywood ..	,,		62·5		72·02		83·0		95·0		90·110		90-110
	(c) Fibre board	,,	30·33	18·0	47·25	25·84	47·25	25·9	46·25	40·0	125·0	80·110	103·0	65-75
49	Sugar	Mill. tons	2·25	3·0	2·25	2·7	2·67	2·3	2·67	3·3	3·5	3·5	3·5	3·5
50	Vanaspati	000 tons	470·3	350·0	496·0	331·1	496·0	360·2	496·0	370·0	550	500	550	500

*Subsequently revised to 110,000

(tt) Since revised to 4·5 Million numbers.

(t) Since revised to 5·2 Million numbers.

(a) Million active spindles.

(w) Lakh looms.

(b) Estimated.

(c) Calendrar year.

(d) Capacity revised as per actual production performance.

(g) Relates to five years.

(h) By working the capacity on three shifts.

(i) An additional 0·5 million bicycles are expected to be produced in the small scale sector.

(j) Another 150,000 sewing machines are expected to be produced in the small scale sector.

(k) These figures are for 300 h. p. and below.

(x) Capacity revised to 68,000 tons and production to 55,000 tons.

(e) Excluding capacity of Railway workshops.

(m) Production figures under cols. 13 & 15 include small scale sector also.

CHAPTER XII

MINERALS AND OIL

Coal.—In 1961-62 there was no increase in production over 1960-61. The raising from the N.C.D.C. collieries were 2 million tonnes less than in the previous year due to (a) curtailment of production necessitated by the accumulated stocks at pit head and (b) the closure of one of the bigger mines following the outbreak of a fire. Though the output in 1961-62 did not show any increase over that of 1960-61, supplies to consumers during 1961-62 were larger than in the previous year by a little over 3 million tonnes. Production in 1962-63 registered an increase of 8.6 million tonnes over the previous year and supplies to consumers were more by 6 million tonnes.

2. As regards the prospects of production in the Third Plan, while project reports have been drawn up in respect of most schemes of N.C.D.C., the foreign exchange requirements have not yet been tied up in all cases, *e.g.* Singrauli, Kathara, Umrer and Sawang. The foreign exchange required for the additional production from the Singareni collieries has also not been tied up. Because of this and the difficulties inherent in developing virgin areas, production in the last year of the Third Plan is expected to be of the order of 24 million tonnes from N.C.D.C. collieries, and a little over 4 million tonnes from Singareni collieries. Judged from the performance in the first two years, it is reasonable to assume that private sector will be able to fulfil the target allocated to them, though it will be only in terms of quantity. The output of superior grades of coal is likely to be less than originally visualised. There has been delay in the utilisation of the World Bank loan by the private sector. Though this may not have adverse repercussions on their programme of overall production during the Third Plan it is likely to affect their programme of modernisation of mines and consequently delay their future development.

3. Altogether coal production is expected to reach about 90 million tonnes as against the plan target of 98.6 million tonnes (97 million tons). This order of production is expected to meet the likely requirements which according to present indications, will be substantially lower than what was previously envisaged. The main reductions are in respect of steel (3—4 million tonnes, other industries (2 million tonnes) and Railways (1 million tonne). Should the demand exceed present expectations, the N.C.D.C. collieries could at short notice step up production by about 2 million tonnes in the outlying fields. While in the Bengal-Bihar coalfields the shortfall will not be appreciable, in the outlying fields movement from which is expected to be comparatively easier, the shortfall will be of the order of about 9 million

tonnes. The position regarding sector-wise production of coal during the plan period is summed up below :

(million tonnes)

	1960-61	1961-62	1962-63	1963-64 (Anticipated)	1965-66 Target as per Third Plan Report	1965-66 Likely achievement
N.C.D.C.	8·06	6·05	8·43	11·48	31·0	24·04
Singareni	2·57	2·83	3·23	3·56	6·1	4·10
Private Sector ..	44·88	46·35	52·17	54·00	61·5	61·74
TOTAL ..	55·51	55·23	63·83	69·04	98·6	89·88

4. *Production of Selected Grades of Coal.*—There has been a fall in the production of selected grades due partly to the recent down-grade revision of coal seams and partly to the exhaustion of reserves of these grades in the working mines. This calls for organising production of better quality coal from deeper levels and virgin areas. Incentives have been given to the coal industry in the recent past in the shape of (a) *ad hoc* increases in coal prices, and (b) liberalisation of the terms of subsidy on stowing and on hard cases. It has also been decided to allow a higher rate of development rebate and duty concessions on specified items of imported equipment. The industry, is, however, pressing for further increase in price and more concessions. A Study Group is examining these questions.

5. *Coal Washeries.*—Progress in respect of coal washeries has been behind schedule. Longer time than expected was taken in the investigation of washability characteristics which determine the technological process. Difficulties were also experienced in arranging foreign financial and technical assistance. Experience has shown that even after a washery is commissioned, it takes considerable time before it can be brought into full production. Existing washeries and the additional capacity likely to be established during the remaining period of the Plan may be expected to supply about 9.5 million tonnes of clean coal in 1965-66, against the requirements of the steel industry presently estimated at about 11 million tonnes.

6. *Neyveli Lignite Project.*—The integrated Neyveli project is behind schedule. All the five units originally envisaged for the thermal power station are expected to be commissioned by the middle of 1964 as against September 1962 originally visualised. The further expansion by 150 MW envisaged in the Third Plan would be completed before the end of the Plan period. The Fertiliser and Briquetting and Carbonisation plants are expected to go into production by the end of the Plan period. Due to the longer period taken in the execution of the project its capital cost has increased

substantially. The effects of the increase in the capital cost on the economics of the project are under examination.

7. *Oil Exploration.*—After the finalisation of the Third Plan, it was decided to adopt an enlarged programme of oil exploration and production estimated to cost Rs. 202 crores, against Rs. 115 crores mentioned in the Plan. The expenditure during the first two years of the Plan was Rs. 36.28 crores and the total expenditure in the Third Plan is currently estimated to be Rs. 147 crores. A substantial part of the enlarged physical programme will be left to be completed in the Fourth Plan.

Production and despatch of crude oil from the Gujarat oil fields were stepped up from 600 tonnes per day to 1800 tonnes per day and are expected to be increased to 2200 tonnes per day early in 1964. The reserves in Gujarat are estimated at 45 million tonnes.

8. *Oil India.*—The total proved and indicated reserves of crude oil as estimated in December 1962, are of the order of 44 million tons. Drilling operations are being continued in the Dum Duma and Ningru area with a view to establishing additional reserves.

9. The first stage of the crude oil pipeline from Nahorkatiya to Gauhati has been commissioned and the laying of the pipes for the second stage has been completed. It would be ready to transport crude oil to the Barauni Refinery of which the first million ton stage is expected to be completed early in 1964.

10. *Petroleum Refining.*—Taking cognisance of the revised estimate of demand of 16.9 million tonnes for petroleum products which has been made by the Oil Advisory Committee the refinery programme has been enlarged to include (a) marginal expansion of the coastal refineries at Bombay by 0.41 million tonnes, (b) expansion of the capacity of the public sector refineries by 2.55 million tonnes, and (c) establishment of a new refinery at Cochin (capacity 2.55 million tonnes) in collaboration with Phillips Petroleum Company. With the implementation of these programmes the total capacity will be 17.9 million tonnes. Given progress according to schedule, the expanded capacity of the public sector refineries is expected to be in full commission by early 1966. The question whether further additional refining capacity is required to be in effective operation at the end of the Third Plan, is being examined.

11. *Product Pipelines.*—The Calcutta-Barauni section of the product pipeline is expected to be completed by April 1965 and the Barauni-Kanpur section by June 1965. The Barauni-Calcutta section will, in addition to moving products from the refinery, also transport crude oil from Calcutta to Barauni. The Gauhati-Siliguri pipeline is expected to be completed by August 1964 as against the original schedule of March 1964. Subsequent to the finalisation of the Plan, two pipelines for transporting oil, one for

products and four for gas in the Gujarat area were considered necessary. They are expected to be completed by December 1965.

12. *Kiriburu and Bailadila Iron ore projects.*—The Kiriburu project has gone into trial production and will go into full production from the beginning of 1964 when exports to Japan will commence as scheduled. Prospecting operations in connection with the Bailadila project are under way and if the N.M.D.C. can complete the preparation of project reports in time, as expected, the project could be commissioned for production towards the end of 1965.

13. *Khetri Copper Project.*—The scope of the Khetri Copper Project has been enlarged and the outlay revised upwards. Foreign exchange has, however, yet to be arranged, which has delayed the implementation of the project. As the shaft sinking is likely to take longer time than that estimated earlier, the smelter cannot go into production before Ocober, 1966 as against mid-1964, originally envisaged.

14. The outlay as originally envisaged for the implementation of the physical programme included in Plan and that currently estimated are given in the statement below. The statement also indicates the anticipated expenditure during the Third plan period and the expenditure that may spill over into the Fourth Plan.

(Rs. crores)

	Plan figures	Present estimates	Estimated expenditure during the first 3 years	Anticipated expenditure in the remaining 2 years	Total anticipated expenditure in the Third Plan	Spill-over into the Fourth Plan
1	2	3	4	5	6	7
Coal including lignite mining	187	244	80	121	201	43
Oil (exploration, production and distribution)	183	291	93	130	223	68
Other mineral projects	82	97	14	66	80	17
Surveys	15	17	6	8	14	3
Mineral projects in the States	11	13	N.A.	N.A.	11	2
	478	662	193	325	529	133

The outlay as currently estimated is Rs. 184 crores more than what was envisaged at the time of the preparation of the Third Plan. Estimates of the cost of certain projects had not been made at that time and such preliminary indication of costs as could be had was taken into account. The general rise in construction costs has also led to some increase. The scope of some of the projects and programmes was subsequently enlarged which also increased their cost.

CHAPTER XIII

TRANSPORT AND COMMUNICATIONS

THERE has been significant improvement in the transport situation over the past two years. The volume of traffic on the railways in terms of originating tons increased from 153.8 million tons in 1960-61 to 174.7 million tons in 1962-63 and is expected to further increase to 191.5 million tons in 1963-64. The traffic in coal carried by the railways has increased from 49.7 million tons in 1960-61 to 60.2 million tons in 1962-63. Improvement in the coal transport position has been particularly marked since November 1962 and loading from almost all the coalfields have exceeded the targets which were set for the railways for this period. These improvements in the transport situation have taken place notwithstanding the heavy burden that was placed on the country's transport system, and more specially the railways, by the emergency which began in the latter half of 1962-63.

2. Since the formulation of the Plan a series of steps have been taken with the object of strengthening programmes for transport services and obtaining the maximum use of available capacities on railways, road transport, coastal shipping, etc. The coal transport problem was gone into carefully by an interdepartmental working group and, on the basis of its studies, railway programmes were strengthened and additional line capacity works were approved with a view to enabling the railways to provide adequate capacity for moving coal not merely in the Third Plan but also for meeting rising demands in the early years of the Fourth Plan. These additions required a further provision of Rs. 145 crores. Steps were taken to secure more effective use of the available capacity on the railways, such as organising movement of coal in bulk in full rakes of BOX wagons and four-wheelers and increased loadings on Sundays and holidays. Measures were also initiated for organising in full train loads to the extent possible the movement of other commodities requiring bulk transport, especially cement, fertilisers, products of steel plants, foodgrains (on Government and trade account) and sugar (for export). With a view to making use of means of transport other than the railways for movement of coal, a special programme for the development of roads in and around colliery areas and connected highways at an estimated cost of Rs. 17 crores was added to the Plan.

3. The emergency led to a review of plans for transport and communications. Road programmes were strengthened in relation to requirements in the north-east and the need to develop the main arterial routes. A road transport organisation was established by the Central Government for the maintenance of essential supplies in the Assam-North Bengal area. In the railway programme an addition has been made of the broad gauge railway

line from Siliguri to Jogigopa. Certain additional programmes connected with the emergency have also been taken up by the Posts & Telegraphs Department. Steps were also taken to ensure speedier implementation of the more essential programmes already included in the Plan.

4. Against a financial provision of Rs. 1486 crores for transport and communications in the Third Plan, the cost of approved programmes was reckoned at Rs. 1630 crores. The total cost of the programmes is now estimated at around Rs. 2070 crores, the increase being mainly accounted for by specific additions to the proposals already embodied in the Third Plan. Expenditure during the first three years will amount to about Rs. 1050 crores and over the five-year period to about Rs. 1965 crores. Estimates of costs and outlays for different programmes under Transport and Communications are set out in the table below :

TABLE 1

Plan provision and cost of programmes for transport and communications

(Rs. crores)

	Plan Provision	Estimated cost of Programmes		Expenditure 1961-64@	Anticipated expenditure 1964-66	Total 1961-66
		Original Estimate	Revised Estimate			
1	2	3	4	5	6	7
Transport						
Railways*	890·0	940·0	1,196·0	654·1	541·9	1,196·0
Roads	272·0	324·1	478·0	220·0	196·3	416·3
Road transport	25·0	26·0	27·0	14·7	8·5	23·2
Shipping	56·8	57·6	57·6	19·0	32·0	51·0
Inland water transport	5·5	7·5	8·7	2·8	3·7	6·5
Ports	86·5	105·1	131·8	48·1	62·5	110·6
Lighthouses and lightships	6·0	6·0	6·0	3·2	2·8	6·0
Tourism	7·7	7·7	7·7	2·2	2·6	4·8
Other transport	1·5	1·5	1·5	0·2	0·4	0·6
Sub-total : Transport	1,315·0	1,475·5	1,907·1	964·3	850·7	1,815·0
Communications						
Civil air transport	55·0	55·0	55·8	24·8	18·2	43·0
Posts and Telegraphs	66·6	77·6	85·4	53·1	32·3	85·4
Broadcasting	7·0	11·0	11·0	5·4	4·5	9·9
Other Communications	6·4	10·8	11·0	4·6	6·1	10·7
Sub-total : Communications	135·0	154·4	163·2	87·9	61·1	149·0
TOTAL	1,486·0	1,629·9	2,070·3	1,052·2	911·8	1,964·0

*These figures do not include the expenditure met from the Depreciation Reserve Fund of the Railways and expenditure on Inventories.

@In addition, a sum of about Rs. 19 crores is likely to be spent from the internal resources of the Major Ports, Air India and Indian Airlines.

The cost of transport programmes has increased from Rs. 1475 crores to Rs. 1907 crores. The cost of communications programmes has gone up from Rs. 154 crores to Rs. 163 crores.

RAILWAYS

5. *Trends in traffic.*—The development programme for railways in the Third Plan was drawn up in relation to a total traffic of 245 million tons estimated to materialse in 1965-66. The present programme provides for capacities adequate for carrying 260 million tons. Owing to shortfalls anticipated in the production of steel, coal and cement industries, originating traffic in the last year of the Third Plan is now reckoned at about 241 million tons. However, since the traffic will be growing steadily over the remaining period of the Plan, originating traffic on the railways during the last quarter of the year 1965-66 is expected to correspond to a higher annual rate than the estimate of 241 million tons for the year as a whole. It is proposed to carry out the rail transport programmes as enlarged so that transport capacities should be adequate and even a little ahead of actual need at the beginning of the Fourth Plan. Details of originating traffic are given below :

TABLE 2

Originating traffic on the railways

(million tons)

	1960-61 (Actuals)	1961-62 (Actuals)	1962-63 (Provisional)	1963-64 (Anticipated)	1965-66		
					Original Plan estimate	Estimates of traffic for which line capacity is being provided	Revised forecast of traffic
1	2	3	4	5	6	7	8
1. Steel and raw materials (excluding coal) ..	14·0	16·9	20·2	22·5	34·0	34·0	27·5
2. Coal	49·7	53·1	60·2	69·6	90·0	95·0	87·6
3. Cement	6·4	6·6	6·6	6·8	12·0	12·0	10·3
4. General goods							
(a) iron ore for exports	2·5	2·5	3·2	4·1	11·0	11·0	7·9
(b) Railway's own stores	16·7	14·6	15·9	17·2	22·5	22·5	22·5
(c) all other goods ..	64·5	64·3	68·6	71·3	75·5	85·5	85·5
TOTAL ..	153·8	158·0	174·7	191·5	245·0	260·0	241·3

6. *Progress of expenditure.*—Expenditure on railway development programmes during 1961-64 will amount to Rs. 866.6 crores or 68 per cent of the Plan provision*. The estimate of expenditure for the remaining two years of the Plan is Rs. 714.4 crores. The break-up under different heads is given below :

TABLE 3

*Progress of expenditure on the railway development programmes***

(Rs. crores)

	Cost of the programme		Anticipated expenditure during 1961—64	Estimate for 1964-66	Total for 1961—66
	Original	Revised			
1	2	3	4	5	6
Rolling stock ..	510	467	310·0	266·0	476·0
Line capacity ..	183	281	164·5	116·5	281·0
Electrification ..	70	98	38·9	59·1	98·0
New lines	147	206 @	112·9	93·1	206·0
Track renewals and other works ..	415	420	240·3	179·7	420·0
TOTAL ..	1,325	1,581	866·6	714·4	1,581·0

The progress of expenditure has on the whole been satisfactory. In respect of electrification, the shortfall in expenditure is mainly on account of electrical locomotives which have been already ordered but for which payments will be made on delivery.

7. *Rolling stock programme.*—The revised rolling stock programme of railways provides for acquisition of 2,070 locomotives and 157,133 wagons (in terms of four-wheelers) as against 1,948 lomotives and 117,144 wagons originally provided for in the Plan.

The assembly of diesel locomotives at Varanasi will start at the end of 1963, and the plant is expected to produce 150 locomotives per annum by the second year of the Fourth Plan. Manufacture of electric locomotives has been organised at the Chittaranjan Locomotive Works. By July 1965 a monthly production of 6 A.C. locomotives is expected to be achieved.

Production of wagons has been stepped up from 11,800 in 1960-61 to 32,000 in 1963-64 (in terms of four-wheelers). During 1964-65 and 1965-66 about 80,000 wagons are expected to be produced. Manufacture of

*The total amount provided for in the Plan was Rs. 1,275 crores inclusive of Rs. 350 crores to be contributed from the Depreciation Reserve Fund of the Railways and Rs. 35 crores required by the Railways for inventories.

**Including expenditure met from the Depreciation Reserve Fund and expenditure on inventories.

Includes cost of strategic lines.

box-type bogie wagons was commenced in the latter half of 1959-60 and capacity now exists for producing 350 to 400 box wagons per month.

8. As indicators of the performance of the Railways, it may be mentioned that there has been increase in tonne kilometres per wagon per day on the broad gauge from 998 in 1960-61 to 1,010 in 1962-63 and on the metre gauge during the same period from 405 to 480. In respect of turn-round time of wagons, however, there has been no significant change over the first two years of the Plan. Various factors influencing the wagon turn-round time are at present under review.

9. *Electrification and line capacity works.*—The electrification programme now provides for electrification of about 2,400 route kilometres compared to 1,760 kilometres originally proposed in the Plan. During the first two years of the Third Plan about 860 route kilometres were commissioned. The sections opened were : Asonsol-Sini, Tatanagar-Rourkela, Damodar-Kali-Pahari, Gomoh-Gaya (including Dhanbad-Titalmari-Kusunda), Gaya-Moghalsarai and Tatanagar-Nimpura.

The present programme for the doubling of lines provides for completion of works on 3,548 kilometres of lines as against the target of 2,560 kilometres initially set in the Plan. During the first two years of the Plan, about 1,405 kilometres of single lines were doubled and opened to traffic, and at the end of 1962-63 doubling was in progress over a length of 2,100 kilometres.

10. *New Lines.*—The Plan provides for construction of 2,400 kilometres of new lines, including 320 kilometres of lines connected with coal development and 632 kilometres with movement of iron ore. During the first two years of the Plan, 683 kilometres of new lines have been completed, including 135 kilometres of coal lines and 107 kilometres of iron ore lines. An important addition made to the new lines programmes is the construction of a broad gauge line from Siliguri to Jogigopa in Assam.

Road and Road Transport

11. *Roads.*—The total road kilometrage was expected to increase from about 230,400 in 1960-61 to 270,400 in 1965-66. Over the first two years of the Plan the total kilometrage is expected to have reached 248,000. Additional road development programmes have been taken up by the Central Government, specially for improvement of roads to meet the needs of heavy traffic in the north-eastern parts of the country. Provision has also been made for developing the main arterial routes and, in particular, for construction of important bridges on these routes. Against the original programme of the Centre for construction of 60 new bridges and improvement of 3,360 kilometres of roads, the present programme provides for 85 new bridges and improvement of 4,500 kilometres, in addition to construction of 480 kilometres of missing links. As against these targets, over the first two years

of the Plan work has been completed on the construction of about 168 kilometres of missing links and 14 major bridges and improvement of about 1,360 kilometres of existing roads.

12. The Plan provided for an outlay of Rs. 272 crores for roads—Rs. 222 crores in the States and Rs. 50 crores at the Centre. The requirements of funds for the larger programmes which have since been adopted are tentatively estimated at about Rs. 416 crores—Rs. 175 crores at the Centre and Rs. 241 crores in the States. Of the total increase of Rs. 125 crores in the Plan outlay for roads in the Central sector, about Rs. 76 crores is accounted for by new schemes connected with the emergency and the balance partly by road works undertaken against credit from the International Development Association and partly by the programme of inter-State roads of economic importance for which specific financial provision was not made when the Plan was drawn up. Expenditure in the first three years of the Plan is likely to be about Rs. 220 crores—Rs. 78 crores at the Centre and Rs. 142 crores in the States.

13. The progress of roads programmes has been satisfactory. Work on the I.D.A. projects was originally expected to be completed by September 1964. There has been some delay in the procurement of machinery and equipment and the completion schedule may be extended to March 1966. A major portion of the programme of emergency works now in progress is expected to be completed by the end of June 1964. The National Highway programme is also expected to be completed according to schedule. The present and prospective size of road programmes and the difficult terrain in many parts of the country have enhanced both the need and the scope for a greater degree of mechanisation in road construction. There will be need for a Central organisation which can hold charge of the pool of equipment for road construction on which various agencies may be able to draw. The volume of construction work falling upon States has in several cases increased considerably and, with a view to ensuring speedy execution, it is necessary for them to take steps to strengthen their existing organisations.

14. *Road Transport.*—Expansion programmes for State road transport proceeded according to the Plan during 1961-63. After the onset of the emergency, the National Development Council recommended that as far as possible programmes for expanding the fleets of State road transport undertakings should be held back for the time being. A Central road transport organisation has been established for maintaining essential supplies in the Assam-North Bengal area. It is proposed to set up a Central Organisation of State road transport undertakings with a view to securing uniformity in procedures and methods of operation and assisting in procurement of supplies at economic rates.

15. In the Third Plan the total number of commercial vehicles was expected to increase from about 200,000 in 1960-61 to 365,000 in 1965-66.

The number of commercial vehicles on the road is expected to have increased to about 270,000 by the end of 1962-63. Difficulties in obtaining commercial vehicles have tended to reduce the pace of progress in road transport.

16. Some steps have been taken over the past two years to assist the development of the road transport industry and, in particular, to encourage the formation of viable units in the industry. The Inter-State Transport Commission is taking measures to facilitate long distance inter-State traffic. The State Financial Corporations Act, 1951 has been amended to make road transport operators eligible for financial assistance under the Act. In consultation with the Planning Commission and in collaboration with the States, the Ministry of Transport is engaged in collecting factual data concerning the road transport industry, both for passengers and goods.

17. *Inland water transport.*—Progress on schemes for inland water transport has been slow. Orders have been placed for dredgers and certain other equipment. The West Bengal Government has undertaken a scheme for training of drivers, serangs and masters. The Kerala Government has taken up the extension of the West Coast Canal from Badagra to Valapattnam a length of 30 miles. Steps are being taken to establish a suitable technical organisation at the Centre as this is an essential step in the development of water transport.

Shipping and Ports

18. *Shipping.*—The total Indian tonnage at the end of the Second Plan was 857,000 GRT including 292,000 GRT for coastal trade and 565,000 GRT for overseas trade. The Third Plan provided for a gross addition of 375,000 GRT and, allowing for replacements, for a net addition of 181,000 GRT. Following improvement in the credit terms on which ships have been available recently, arrangements for obtaining 370,000 GRT were made within the first year of the Plan. The gross five-year target was raised last year and ships aggregating 6.07 lakh GRT have already been acquired or ordered. It has been recently agreed that further offers for acquisition of ships on suitable terms may be considered on merits, bearing in mind the need to keep commitments for future repayment of foreign exchange within reasonable limits.

19. In the first two years of the Third Plan, the total tonnage increased by about 200,000 GRT from 857,000 GRT in April 1961 to 1,059,000 GRT in April 1963; coastal tonnage rising from 292,000 GRT to 373,000 GRT and overseas tonnage from 565,000 GRT to 686,000 GRT. Both the public and the private sectors have shared in this expansion. Tonnage in the public sector increased from 152,069 GRT in April 1961 to 227,759 GRT in April 1963 and that in the private sector from 705,328 GRT to 831,242 GRT.

The share in the total overseas cargo carried by Indian ships from six major ports is estimated to have increased from 22 lakh DWT in 1960-61 to 28 lakh DWT in 1961-62.

20. *Ports.*—The capacity of major ports is expected to increase from 37 million tons at the end of the Second Plan to 49 million tons in 1965-66, the present level of traffic being around 36 million tons. In the main, programmes for major ports are a continuation of those initiated in the Second Plan. Besides these, the Third Plan provided for beginning work on three new all-weather ports at Haldia, Tuticorin and Mangalore, to which Paradip has since been added.

21. Among projects under implementation, the more important are the Wet Dock Scheme at Madras port and the scheme for providing additional four berths and the ore loading installations at Visakhapatnam port. Satisfactory progress has been made on these schemes. All the berths of the Wet Dock at Madras are expected to be commissioned by October 1963. There has been some delay in the delivery and assembly of the ore handling plant at Visakhapatnam.) Efforts are, however, being made to complete the installation in time for exports from Kiriburu being commenced according to schedule under the agreement with the Japanese.

22. The project report and a master plan for the port of Haldia have been prepared. Necessary steps have also been taken for the provision of electricity, water supply and road connections to the port; and the alignment of the rail link from Kharagpur to Haldia has been finalised. Preliminary project reports have also been drawn up for the development of Mangalore and Tuticorin as all-weather ports, and nucleus organisations have been established for the execution of these projects. The development of Paradip as an all-weather port is being undertaken by the Government of Orissa.

Civil Air Transport

23. On account of transfer of some of the aerodromes to Defence the programme of works at aerodromes has been reviewed and some schemes have been dropped. Progress in the purchase and installations of aeronautical equipment has been slow on account of shortage of foreign exchange.

24. Air India has acquired a fleet of 6 Boeing jet aircrafts of which 3 were acquired in the Second Plan period and the remaining 3 in the first two years of the Third Plan. The Corporation has placed orders for a seventh Boeing which is scheduled for delivery in May 1964. It has been able to increase the frequency of operation on a number of routes and, over the first two years of the Plan, the available capacity of the Corporation in terms of tonne kilometres has increased by 61 per cent, while traffic in terms of revenue tonne kilometres has increased by 46 per cent.

25. During the first two years of the Plan, the Indian Airlines Corporation purchased 5 Fokker Friendship aircrafts and 4 Viscounts. The overall capacity of the I.A.C. during the first two years has increased by 20 per cent, while traffic in terms of revenue tonne kilometres has gone up by about 18 per cent. The growth of traffic, specially on the trunk routes, has necessitated purchase of bigger aircrafts to replace the Viscounts; and the Corporation has recently placed orders for the purchase of 3 Caravelle-aircrafts.

26. Programmes relating to communication services, specially telecommunications, were augmented recently in view of the emergency. Details of the outlay for programmes of posts and telegraphs are given in the following table :

TABLE 4

Plan provision and cost of development programmes of Posts & Telegraphs

(Rs. crores)

	Cost of the programme	Expenditure 1961—64	Estimated Expenditure 1964—66	Total 1961—66
1	2	3	4	5
Local telephones	36·09	24·72	11·37	36·09
Trunk telephones	6·13	5·26	0·87	6·13
Coaxial and Microwave	13·31	7·77	5·54	13·31
Telegraph service	2·70	1·86	0·84	2·70
Telecommunication facilities for other Administration	5·66	3·36	2·30	5·66
Buildings	5·81	3·20	2·61	5·81
Miscellaneous	1·23	0·62	0·61	1·23
Railway electrification	14·46	6·34	8·12	14·46
TOTAL	85·39	53·13	32·26	85·39

Foreign exchange requirements for development programmes under Posts and Telegraphs have been covered by a loan from the International Development Association.

27. The progress in the development programmes of the Posts and Telegraphs Department has been satisfactory. The Plan provided for installation of 300,000 new telephone connections and opening of 1,200 new exchanges and 2,000 public call offices. Over the first two years of the Plan about 128,600 new telephone connections were installed and 474 new exchanges and 492 public call offices opened. Over the five years of the Plan the targets are likely to be exeeded and it is now expected that it may be possible to establish 320,000 new telephone connections and about 1,290 new exchanges. An important scheme in the telecommunications plan is that relating to the

laying of coaxial cables on trunk routes. The programme provides for completion of 6,150 kilometres of coaxial cables during the period of the Plan. Difficulties were experienced on account of non-availability of cables in the first two years. It has been decided to expand the capacity of the Hindustan Cables from 3,000 miles per annum to 50,000 miles per annum and also to set up another unit for manufacture of telecommunication cables in the Fourth Plan.

28. The programme of development for Indian Telephone Industries provided for a production of 180,000 exchange lines (nominal) and an equal number of telephone instruments by 1965-66. Production during 1962-63 was 113,600 exchange lines and 132,000 telephone instruments. It has been recently decided to take up the production of cross bar equipment and the question whether manufacture of this type of equipment should be undertaken at the existing factory or at a new establishment is under consideration.

29. *Broadcasting.*—The programme provides, among other schemes, for the extension of medium wave services, strengthening of external broadcast services, and provision of community listening sets. In view of the emergency, some adjustments have been made in regard to the locations of transmitters provided for in the programme. A scheme has been formulated for supply of community listening sets in villages on an accelerated scale.

CHAPTER XIV

SCIENTIFIC RESEARCH AND NATURAL RESOURCES

1. Scientific and Industrial Research

For several years high priority has been given to programmes of scientific research. These programmes have essentially a continuing and steadily developing character, depending on progress in the training of high level scientific personnel and identification of new problems calling for research and investigation. In outlining the objectives for the development of scientific research in the Third Plan, as in the Second, emphasis has been placed on strengthening existing research institutions, expanding research facilities in new fields, especially in engineering and technology, which had not received adequate attention earlier, training of research personnel and more effective utilisation of the results of research.

2. By the end of the Second Plan, 28 National Laboratories and research institutions had been established by the Council of Scientific and Industrial Research. Of these, five were approved during the letter part of the Second Plan, namely, the Central Mechanical Engineering Research Institute, the Central Public Health Engineering Research Institute, the National Aeronautical Laboratory, the Regional Research Laboratory, Assam and the Central Scientific Instruments Organisation. Satisfactory progress has been made in the development of all these institutions.

3. The Third Plan provided for the establishment of the Institute of Petroleum, the National Biological Research Laboratory, a Fire Research Station and another Regional Research Laboratory. Of these, the Institute of Petroleum has started functioning. The main task of the Council of Scientific and Industrial Research has been to strengthen the National Laboratories and research institutions, establish new sections to meet additional needs and step up research programmes. Mention may be made of the following :

(*a*) new Divisions for dyes, inorganic chemicals and essential oils at the National Chemical Laboratory;

(*b*) a new Division for alloy steels at the National Metallurgical Laboratory;

(*c*) a separate unit for research on mica products at the Central Glass and Ceramic Research Institute;

(*d*) a manganese beneficiation plant at the National Metallurgical Laboratory;

(*e*) a pilot plant project for gasification of coal at the Regional Research Laboratory, Hyderabad;

(*f*) work on algology and pilot projects for recovery of by-products from salt bitterns at the Central Salt and Marine Chemicals Research Institute; and

(*g*) establishment of regional fruit and vegetable preservation stations at Nagpur, Bombay, Trichur, Lucknow, Jammu and Calcutta.

After the onset of the emergency, research work has, in the various laboratories and institutes, been oriented to meet defence needs. In this connection a number of projects have been taken up.

4. Assistance by way of specialised equipment, experts and grant of fellowships to Indian scientists for training abroad is being received from a number of sources, including the U.N. Special Fund. Among projects assisted by the Fund are the Central Mechanical Engineering Research Institute, the Central Mining Research Station, Central Public Health Engineering Research Institute, the Central Scientific Instruments Organisation and the National Aeronautical Laboratory. The French Institute of Petroleum have deputed experts to assist in planning and setting up the Indian Institute of Petroleum A Precision Instruments Training Centre is being established with Swiss collaboration at the Central Scientific Instruments Organisation.

5. During the first three years of the Plan, a total expenditure of Rs. 13.3 crores has been incurred on the development projects of C.S.I.R. It is considered that during the remaining period of the Plan larger resources will have to be made available to the National Laboratories and research institutions to enable them to meet the rapidly expanding needs of research, including those relating to defence.

6. The results of research conducted by the National Laboratories and research institutions have been of increasing value to industry in the public and private sector. They have helped in improving manufacturing processes and developing new products and in the utilisation of by-products or residues which were being allowed to go waste. However, in relation to needs and the potentialities, progress in the application of the results of research has not been adequate so far and much greater attention has to be given to it in the future. The work of the laboratories has to be closely and continuously related to the problems of industry and, by every means possible, the two-way communication between the National Laboratories and industry has to be strengthened. In recent years the idea of coöperative research between industry and the National Laboratories has been further developed. Co-operative research associations are being set up in the tea, wool, cement and

automobile industries. The C.S.I.R. is also setting up a Central Designs and Engineering Unit, an Operational Research Unit and a Liaison and Extension Service for more rapid and effective communication of the results of research to industry.

The work of the National Research Development Corporation is under review by a special committee which has been recently set up.

7. The authorised strength of the Scientists' Pool has been raised from 300 to 500. The assurance provided by the Pool has helped a considerable number of Indian scientists and technologists working abroad to return to the country and seek opportunities appropriate to their talents.

8. During the past few years demands on the Survey of India have increased considerably and the organisation has been unable to cope with them. In consultation with the Ministries concerned, the Planning Commission undertook an assessment of requirements of topographical, geographical, and other special maps for hydro-electric projects, mineral explorations, forest development programmes, pre-investment surveys and other plans. In addition to securing further equipment, the main requisite for enabling the Survey of India to meet the larger requirements is a greatly expanded training programme. It has, therefore been decided to increase the normal training capcity of the Survey of India for officers and technicians from 150 to 500 per year. A project which has been formulated in this connection has been submitted for assistance to the U.N. Special Fund. Meanwhile, a programme for adding 26 survey parties has been approved and is being implemented over a period of three years 1963-64 to 1965-66. The cost of the expansion programmes is estimated at Rs. 3.85 crores.

9. Adequate progress has not been made in implementing the programmes of the Botanical Survey and the Zoological Survey.

During the first three years of the Plan, grants amounting to about Rs. 128 lakhs will have been made to scientific societies and associations.

10. Work on construction of the Tarapore nuclear power station, for which detailed preparatory and planning work has been undertaken by the Department of Atomic Energy, is being started during the current year. Preparatory work on the construction of a second power plant to be located in Rajasthan has also commenced. A number of studies are in progress at the Atomic Energy Establishment at Trombay, including design studies for building a prototype power reactor using natural uranium as fuel, heavy water moderator and organic coolant aiming at providing essential data for nuclear power generation. Of the other research or development work under the Atomic Energy Establishment, mention may be made of the project for

the manufacture of electronic equipment which has made considerable headway, setting up of a Van-de-Graff Laboratory, initiation of space research and development of Cosmic Ray Laboratories at Gulmarg and Kodaikanal.

2. Development of Natural Resources

11. In the Report on the Third Plan it was emphasised that the long-term goals of development in agriculture, irrigation, power, industry and minerals could be achieved only if a careful assessment of the requirements and the nature and extent of the country's natural resources was made and the necessary steps were taken well in advance. Moreover, for a balanced development it was equally essential to assess availability, requirements and possibilities in relation to each of the principal regions within the country. With the object of guiding studies and surveys of natural resources with special reference to long-term planning, in December 1961, the Planning Commission constituted a high level Committee on Natural Resources composed of Members of the Planning Commission and heads of leading national institutions engaged in scientific and technical research and surveys. The functions assigned to the Committee are :

(*i*) to assess from time to time the available information regarding the natural resources of the country and to identify gaps in it in relation to programmes of planned development;

(*ii*) to arrange for the formulation, in collaboration with the various organisations concerned, of coordinated programmes for surveys of natural resources in different parts of the country in relation to plans for long-term economic development;

(*iii*) to initiate studies on problems relating to natural resources;

(*iv*) to make recommendations bearing on the conservation, utilisation and development of natural resources; and

(*v*) to disseminate information concerning the country's natural resources through publications.

12. A comprehensive review of the existing arrangements regarding surveys of natural resources has been recently completed. The scope and area coverage of different types of surveys have been examined and the principal gaps in coverage and other deficiencies identified. On the basis of this study, a number of steps for strengthening the existing survey agencies, bringing about greater coordination between them and undertaking surveys in new fields, have been proposed. A programme for soil surveys has also been formulated.

13. A number of studies on land resources and agriculture have been initiated. A study on waste-lands, including saline, alkaline and water-logged lands, has been completed. This study makes an assessment of

various categories of waste-lands, the area which can be brought under cultivation in different States and the reclamation and soil improvement measures needed for the purpose. Two studies on soil conservation, one relating to conservation measures in the catchment areas of river valley projects and the other on conservation in ravine and gully eroded lands, are in progress.

14. A second group of studies relates to individual crops, especially commercial crops for which there is steadily increasing demand in a growing economy. Among the studies completed so far, those on the fibre and oil-yielding crops may be specially mentioned. Studies on cotton and jute and groundnut and coconut have been completed. Studies on demarcation of areas of low unit yields and analysis of factors contributing to these, on delineation of agricultural regions and of the analysis of the gap between agricultural research and its application are in progress. The basic data brought out by these studies will lead to greater understanding of the physical and economic conditions of agriculture in different parts of the country and will assist agricultural planning.

15. The studies on mineral resources include assessment of demand for minerals at the end of Fourth and Fifth Plan periods, assessment of copper, lead, zinc phosphate, bauxite, titanium and antimony bearing regions of India and the contribution of aerial photographic and aeromagnetic surveys in mineral exploration in promising areas.

16. In the field of water resources, studies have been initiated on the groundwater resources of the country on water needs for urban and industrial uses, and assessment of the water resources of selected river basins. The last study is being undertaken by the Ministry of Irrigation and Power. Studies like urban and industrial uses of water and control of polution have to be undertaken on a continuing basis and the necessary investigations and surveys for such studies have to be greatly expanded in future in view of the rapidly increasing demand for water for these uses.

17. There is immense scope for utilisation of by-products and other wastes. The Committee on Natural Resources has initiated a series on this subject. Two studies, one relating to utilisation of urban wastes and the other on utilisation of fifteen selected products in the field of agricultural, mineral, forest and marine resources, have been completed.

18. These studies of the Committee on Natural Resources reveal the wide range of subjects on which detailed work will have to be done in the coming years for obtaining more complete and purposive knowledge of the natural resources of the country. They identify gaps in information, point to the need for further investigations and surveys and facilitate specific recommendations for improving methods of resource utilisation.

CHAPTER XV

EDUCATION

IN both general and technical education, a steady rate of expansion has been maintained during the first half of the Third Plan. Efforts to provide facilities for education of children in the age-group 6-11 have resulted in larger enrolment in the primary schools than was anticipated in the beginning and it is estimated that the target of bringing 76.4 per cent of the children of this age-group to schools may be exceeded by the end of the Third Plan. There is also greater demand for facilities for education at the middle schools and high and higher secondary schools. Similar expansion has taken place at the college and university stage. The programmes of improvement of education at the secondary and university stages are being implemented in respect of science education, provision of qualified teachers and equipment and library facilities. Facilities for research are being developed and the number of scholarships and fellowships have been increased.

In the field of technical education, after the emergency, there was an assessment of requirements of technically trained persons and to meet the larger needs, admissions both for diploma and degree courses were increased in selected institutions. It is estimated that the total annual admissions would increase to about 24,000 seats for degree courses in engineering and 48,000 for diploma courses by the end of the Third Plan against the Third Plan target of 19,000 and 37,000 respectively.

2. While in terms of physical achievements, the progress has been satisfactory, there has been overcrowding of classes, unfavourable teacher-pupil ratio and deterioration in standards in primary and secondary education. Shortages of teachers for institutions of technical education and also for teaching of science in schools and colleges has raised certain problems in regard to quality of education. More attention will have to be given, in the next two years, to measures for the maintenance and improvement of standards of education at all levels and the administrative and financial implications will have to be examined.

3. *Outlay and Expenditure.*—Out of a total plan provision of Rs. 560 crores for General and Technical Education, the actual expenditure was about Rs. 70 crores in 1961-62, Rs. 95 crores in 1962-63 and the Budget for 1963-64 is of the order of 101 crores. Thus in the first three years the likely expenditure may be Rs. 266 crores.

GENERAL EDUCATION

4. *Elementary Education.*—Table 1 indicates the expansion of enrolment at the elementary (primary and middle) stage of education :

TABLE 1

Enrolment at the Elementary stage

Enrolment in classes	Unit	1960-61 (Position)	1961-62 (Achievement)	1962-63 (Anticipated)	1963-64 Target	1961-64 4+5+6	1961—66 Target	1961—66 Estimated	1965-66 Position (3+9)
1	2	3	4	5	6	7	8	9	10
I-V									
Total	lakhs	349·9	39·9	31·1	31·2	102·2	153·0	169·8	519·7
Girls	lakhs	114·0	16·8	13·3	16·3	46·4	85·6	84·7	198·7
VI-VIII									
Total	lakhs	67·1	7·4	8·8	8·9	25·1	34·6	42·2	109·3
Girls	lakhs	16·3	2·1	3·2	2·9	8·2	12·8	13·8	30·1

To cope with the demand for increase in enrolment certain steps are being taken by the State Governments but since additional buildings or trained teachers could not be easily provided, there has been a rise in teacher-pupil ratio, overcrowding of classes and introduction of double shifts.

5. *Middle School Education.*—The total enrolment in the middle classes by the end of the Third Plan is likely to be 109 lakhs against 67 lakhs in 1960-61. It is estimated that schooling facilities will be available to about 32% of the children of the age-group 11-14 by 1966 but in some States there may be difficulties in achieving the targets.

6. *Midday Meals.*—A significant development in the Third Plan is the progress made by the scheme of Midday Meals for children of primary schools. With the assistance given by international and foreign agencies, about 10 million children will be covered under the scheme by 1965-66 as against 4 millions in 1960-61. Assistance to the scheme is provided by the Central Government at the rate of 33-1/3% of the expenditure.

7. *Secondary Education.*—The target of additional enrolment provided for the age-group 14-17 in the Third Plan was 17 lakhs and this is now likely to be 23 lakhs. Table 2 indicates the position :

TABLE 2

Enrolment at the Secondary stage

(Lakhs)

Year	Enrolment in classes IX-XI		
	Boys	Girls	Total
1	2	3	4
(*i*) 1960-61	24·07	5·48	29·55
(*ii*) 1961-62	27·82	6·43	34·25
(*iii*) 1962-63	31·82	7·53	39·35
(*iv*) 1963-64	35·52	8·63	44·15
(*v*) 1965-66 (Target)	35·70	9·90	45·60
(*vi*) 1965-66 (Estimated)	41·46	11·16	52·62

The programme for the conversion of high schools into higher secondary schools has not been implemented in certain States. There have been difficulties due to shortage of staff, lack of equipment and other materials. The target of the conversion of high into higher secondary schools by the end of the Third Plan was 6,390 which is now estimated to be 5,315. The total number of secondary schools in 1965-66 would be 22,400 as against the previous estimate of 21,800.

The scheme of expansion of science education in secondary schools, as an elective or optional subject, has not progressed so well mainly due to shortage of science teachers. It is estimated that elective science will be introduced in about 8,400 schools instead of 9,600 schools originally set out. The requirements of science teachers are proposed to be met by increasing the science education facilities at the university stage and through the provision of condensed content and training courses for existing science teachers.

8. *University Education.*—The number of universities has increased from 45 in 1960-61 to 54 in 1962-63. While the enrolment in Arts, Science and Commerce courses in 1960-61 was 8.77 lakhs, it rose to about 10.60 lakhs in 1962-63 as shown in Table 3.

TABLE 3

Enrolment—Universities and Colleges—Total & Science

Year	Universities	No. of Arts, Science and Commerce Colleges	Enrolment in Arts, Science and Commerce Classes	Enrolment in Science Classes	Col. 5 as %age of col 4
1	2	3	4	5	6
			(Figures in 000's)		
1960-61 (Position)	45	1,076	877	300	34·2
1961-62 ..	46	1,194	962	337	35·0
1962-63 ..	54	1,1283	1,060	386	36·4
1965-66 (Targets)	58	1,400	1,300	553	42·5

An important scheme is to increase the provision of science education facilities for 5.53 lakh students going in for higher education in 1965-66 as against 3 lakhs in 1960-61. Some difficulties have been experienced during the first three years in regard to library facilities, building equipment and teaching personnel.

Certain measures have also been initiated for development of post-graduate departments, betterment of libraries, expansion of science education, provision of staff quarters, revision of salary scales of teachers, development of university campus, provision of senior and junior fellowships and development of affiliated colleges. Correspondence courses have been started at the University of Delhi on experimental basis.

9. A scheme of centres of advanced studies, with a view to improving the quality of post-graduate study and research has been introduced. 26 such centres at different universities will be established during the Third Plan of which 20 have already been established in different universities in subjects like theoretical physics, astrophysics, chemistry of natural products, radio wave propagation, upper atmosphere and radio astronomy, mathematics, agricultural economics, etc. The allotment of Rs. 1.5 crores for this scheme will be supplemented by assistance from U.N.E.S.C.O. to the tune of about $8.87 lakhs.

10. *Scholarships.*—In the Third Plan originally there was a provision of Rs. 37 crores for scholarships under general education, technical education, vocational training and welfare of backward classes. These amounts have since been augmented by the provision of Rs. 9 crores for the scheme of loan scholarships which has commenced from the year 1963-64. Besides these provisions, there are research scholarships and fellowships provided by the University Grants Commission and scholarship schemes under Agriculture, Health and Scientific Research.

11. Under National Scholarships every year 2,400 awards are made to outstanding students for post-matric studies. Under the scholarships for children of primary and secondary school teachers, 500 awards are made every year. The loan scholarships scheme envisages 70,000 awards during the last three years of the Third Plan. Under technical education programmes, 13,000 new scholarships have been instituted for the plan period; 8,000 for degree courses and 5,000 for diploma courses. During the first two years of the Plan about 4,000 scholarships were awarded to new entrants to degree and diploma courses.

12. With the outlays provided in the Third Plan it is expected that the total expenditure on scholarships may increase from Rs. 17 crores in 1960-61 to over Rs. 32 crores in 1965-66. These amounts, however, exclude the expenditure which the State Governments will have to incur on disbursing the amounts for freeships at the secondary stage.

13. *Training of Teachers.*—The Third Plan laid emphasis on the provision of adequate number of trained teaching personnel at the elementary and the secondary stages of education. The Table 4 indicates the progress in the first two years of the Plan and estimate of teachers who would be trained by 1965-66.

TABLE 4

Trained teachers for Elementary and Secondary schools

(in lakhs)

Item	1960-61	1961-62	1962-63	1965-66 (Target)
1	2	3	4	5
Primary Schools				
Teachers	7·40	8·22	8·90	12·66
%age of trained teachers ..	64·1	66·5	67·5	75·0
Middle Schools				
Teachers	3·44	3·65	3·84	3·60
%age of trained teachers ..	66·6	69·0	68·8	75·0
High/Higher Secondary Schools				
Teachers	2·94	3·27	3·43	2·90
%age of trained teachers ..	64·3	66·1	66·2	75·0

State Governments will have to accelerate the programme to realise the targets set out as the training facilities have not kept pace with the requirements of expansion. The difficulties in making financial provisions for the

programmes of teachers training have to be overcome during the remaining period of the Plan through budgetary procedures by those State Governments where the progress has been slow.

14. Four Regional Colleges of Education have been set up to train teachers for diversified courses and in other subjects like science and mathematics. In addition, Institutes of Education for primary teachers will be set up in all the States with assistance from the Centre.

15. Due to certain difficulties of getting staff with requisite qualifications, both in elementary and secondary schools, teachers with lower qualifications are employed. Some programmes to improve the qualifications of existing teachers through part-time and correspondence courses are being considered.

16. *Adult Literacy.*—Between 1951 and 1961, literacy has increased only from about 17 per cent to about 24 per cent. Even in 1961 only about 1/8th of the population among women and over 1/3rd among men were literate. The percentage of illiterates in rural areas in 1960-61 would be as much as about 81 as against 53 in urban areas.

Recently a review of the programmes of adult literacy was carried out and it was indicated that it would be necessary for education departments to attach high priority to this programme and to provide funds in their own budgets for schemes of adult literacy in addition to what has been provided in the Ministry of Community Development in the budgets of the development blocks. The State Governments are being advised to take this action for the annual plans of 1964-65 and 1965-66.

The C.O.P.P. Team on Social Education in their recent Report, among other things, have recommended that each Central/State Government department provide facilities for its illiterate employees below the age of 45 years to acquire literacy upto primary standard and similarly the industrial establishments in both public as well as private sector should own responsibility for adult literacy classes for their workers before/after scheduled working hours. They have also suggested drawing up of an integrated programme of school and adult education to ensure that after 1975 or 1980 no adult is illiterate.

Technical Education

17. The target set in the Third Plan, as shown in Table 5 was to raise the admission capacity of degree and diploma courses from 13,824 and 25,801 respectively in 1960-61 to 19,137 and 37,391 in 1965-66. On account of emergency, the additional need for technical personnel was felt and certain institutions were selected for provision of larger facilities with the result that the intake in 1965-66 is expected to be 23,130 for degree courses and 47,546 for diploma courses.

TABLE 5

Expansion of technical education facilities

Year	Degree course (annual admission)	Diploma course (annual admission)
1	2	3
1960-61	13,824	25,801
1961-62	15,850	27,701
1962-63	17,232	30,919
1963-64	20,430	36,320
1964-65	21,780	41,930
1965-66 (Original)	19,137	37,390
(Estimated)	23,130	47.546

18. Part-time and sandwich courses for technical education have been initiated and 19 centres selected for the introduction of part-time degree courses for diploma holders against a target of 25 for the Third Plan. A special scheme for three-year degree course in engineering and technology for graduates in science has been formulated. For this purpose, 23 institutions have been selected with about 1,035 admissions. Post-graduate courses for engineering and technology are being re-organised and 23 new centres have been selected where Master's degree courses in various branches of engineering and technology have been instituted. By 1965-66, it is estimated that about 2,000 seats will be available for post-graduate courses. The Indian Institutes of Technology at Bombay, Madras and Kanpur have been established and the Delhi College of Engineering and Technology, which is being assisted by the British Government, is being developed on the same lines. Two All-India Institutes of Management have started functioning at Calcutta and Ahmedabad and steps have been taken to set up the national institute for training in industrial engineering at Bombay.

19. The main difficulties experienced in implementing the programme of technical education are shortages of teachers, building materials and foreign exchange. These have led to deterioration in the quality of technical education. The percentage of shortage of qualified teachers in engineering institutions ranges from 40 to 45 varying from State to State and institution to institution. The foreign exchange requirements for Technical Education are of the order of Rs. 14 crores including Rs. 3.5 crores under foreign aid programmes for certain selected institutions. For the first 2 years an allocation of only Rs. 1 crore of foreign exchange has created difficulties for institutions in securing suitable equipment. In the case of building material there is shortage of cement, steel and other requirements.

20. Steps have been taken to secure teaching personnel by introducing the Technical Teachers' Training Scheme in 7 different centres which are likely to be increased further as well as the scheme for training of teachers abroad. Some States, however, are finding difficulties in implementing the scheme of revision of salaries recommended by the All India Council of Technical Education which should attract more teachers in Engineering Colleges and Polytechnics. A proposal for creation of a Central Pool of Technical Teachers from which critical shortages in technical institutions will be met is under consideration.

The question of providing suitable machinery which will arrange for a ready supply of indigenous equipment and also to investigate into the possibility of procuring items of equipment with foreign exchange component from East European countries as well as Japan is under consideration. Securing of indigenous equipment for which there is a heavy demand will also be dealt with by the proposed agency.

CHAPTER XVI

HEALTH

As against the provision of Rs. 342 crores for the health programmes in the Third Plan, expenditure in 1961-62 was Rs. 57·98 crores and for 1962-63 is estimated at Rs. 71·45 crores. The outlay estimated for 1963-64 is Rs. 64·74 crores.

2. *Medical Care.*—Institutional facilities for medical care have shown marked expansion during the first two years of the Third Plan. The number of beds in hospitals and dispensaries has gone up from 185,600 in 1960-61 to 193,270 in 1961-62 and is estimated to have been about 202,000 at the end of 1962-63. With this rate of progress, the target of 240,100 beds by the end of the Third Plan is likely to be achieved or slightly exceeded.

3. The number of primary health units is likely to increase from 2,800 at the end of the Second Plan to 3,442 at the end of 1962-63. This is somewhat less than the number of blocks because the primary health units were not started during the pre-extension stage. However, a decision has recently been taken that primary health units should be established even during the pre-extension stage. The main difficulties in regard to the increase in the number of primary health units arise from shortages of doctors and other staff and these in turn are largely due to lack of incentives and facilities, such as residential quarters which would attract persons for service in rural areas. Some States have already taken steps to give additional allowances to doctors working in the rural areas.

4. *Medical Education.*—The number of medical colleges has increased from 57 at the end of the Second Plan to 71 at the end of 1962-63 and the number of annual admissions has risen from 5,800 in 1960-61 to 7,820 in 1962-63. By the end of the Third Plan, the number of colleges is likely to increase further to 80 and annual admissions to over 11,000. After the declaration of emergency, steps were taken to augment training facilities for doctors, nurses and auxiliary nurse-midwives for meeting additional requirements for defence. A special provision of Rs. 2·5 crores has been made in 1963-64 for increasing the annual admissions in the medical colleges to a maximum of 200 per college. The duration of the medical course has been reduced to 4½ years by cutting down the holidays and vacations. With a view to recovering the wastage on account of the large percentage of failures, arrangements have been made to hold three examinations in a year. Compulsory period of internship and housemanship has been dispensed with for the duration of emergency and one year's service in the defence

forces or as house-man in civil establishments is recognised for registration purposes. These measures will increase availability of doctors to some extent in the Third Plan but their full effect will be felt only in the Fourth Plan. Population-doctor ratio which remained at 6,000 : 1 over the decade 1951-61 is not likely to improve during the Third Plan unless other measures are taken. A scheme for starting a short-term course for the training of "medical assistants" is being considered with a view to augmenting medical facilities in rural areas.

5. The increase in the number of medical colleges and in their intake has intensified the problem of shortage of teachers. The number of teachers required during the Third Plan is now estimated at 2,600 against the original estimate of 2,000. Among the steps taken to increase the supply of teachers are upgrading of departments of medical colleges, award of scholarships for post-graduate education, institution of arrangements for obtaining teachers from other countries on an exchange basis and holding of refresher courses, seminars, etc. While these measures will help to some extent in augmenting the supply of teachers, shortages are likely to persist during the remaining period of the Plan. A further measure that may be suggested is the utilisation of services of well-qualified and experienced private practitioners as teachers on part-time basis. It is also a matter for consideration whether in view of the present shortage of teachers, further expansion of medical colleges should be allowed.

6. A number of research schemes are in progress. High priority has been given to research in communicable diseases, particularly, tuberculosis, cholera, leprosy, trachoma and virus diseases. Grants have been made to a number of institutes for cancer research. Research projects on virus infections in men and animals with special emphasis on arthopod-borne viruses are in progress. Research on mental diseases is being continued and research in occupational health is proposed to be taken up at two or three new centres.

7. *Control of Communicable Diseases.*—Programmes for the control of communicable diseases, especially those for malaria and small-pox eradication, have not progressed according to schedule, partly because the State Governments were not able to make adequate provision for them in their annual plans. The State Governments have been addressed to make sufficient provision for these programmes and not to divert funds specifically allotted for these programmes to other sectors.

8. *Malaria Eradication.*—There are three operational stages in the malaria eradication programme, namely, the attack phase (spraying), consolidation (during which spraying is withdrawn and surveillance starts) and the maintenance phase (during which supervision is taken over by the local authorities). Out of 391 units established so far, 140·47 units entered consolidation phase during 1962-63 and another 100 units will reach this stage in

1963-64. With the exception of 33 units in border areas, spraying operations will be withdrawn from all the units in 1964-65. Administrative delays in carrying out overall surveillance operations, increase in population, need for extending laboratory facilities and increased expenditure on spraying etc. have led to an increase in the total cost of the programme in the Third Plan from Rs. 55 crores to about Rs. 74 crores. According to present expectations, 260 units will go over to maintenance phase by 1965-66 and the remaining 104·5 units will continue in the Fourth Plan.

9. *Filariasis.*—By 1961, 47 control units had been established. In the light of further experience gained, it is felt that more attention should be given to drainage scheme in towns affected by this disease. The State Governments have been apprised of the position and requested to see that due attention is paid to this aspect.

10. *Smallpox.*—National Smallpox Eradication Programme was started in early 1962. In six States the programme is expected to be completed by the end of 1964, while in another five States the programme might be completed by the middle of 1965. The State Governments have been requested to take action to intensify the programme as the present emergency calls for more urgent steps being taken to prevent the spread of infection.

11. *Tuberculosis.*—As against 200 clinics to be established in the Third Plan, only 43 clinics have been established in the first two years. Slow progress in respect of establishment of T.B. clinics has been due to delay in putting up buildings and in the appointment of necessary staff. Steps have been taken to increase the production of anti-tuberculosis drugs and to train doctors and other para-medical personnel in anti-T.B. work. Arrangements are also being made, for providing X-ray facilities through mobile units at some primary health units for diagnostic purposes, in addition to providing laboratory facilities for examination.

12. *Venereal Diseases.*—Only 14 clinics have been established during the first two years as against 100 district and 6 headquarters clinics envisaged for the Third Plan.

13. *Trachoma.*—In view of heavy incidence of trachoma in Punjab, north-west parts of U.P. and Rajasthan, special measures have been taken in these areas.

14. *Leprosy.*—Out of 700 SET (Survey, Education and Treatment) Centres and 100 control units provided in the Third Plan, only 117 SET Centres and 9 control units have been established. On the basis of recent estimates regarding incidence of leprosy in different parts of India, it is proposed to lay more emphasis on the control programme in highly endemic areas.

15. *Cholera.*—In West Bengal a programme for the improvement of water supply as a measure against cholera has been approved at a cost of Rs. 7·54 crores. In collaboration with W.H.O. a Cholera Research Centre was established in Calcutta in 1962. Manufacture of cholera vaccine has been further stepped up and production in 1962 from different vaccine producing centres was about 35 million c.c.

16. *Urban Water Supply and Sanitation.*—In addition to 275 schemes of urban water supply and drainage carried over from the Second Plan, 194 new schemes were approved in the first two years of the Third Plan at an estimated cost of about Rs. 27 crores. Progress in implementation of urban water supply programme has been conditioned by the availability of drilling equipment, pipes, cement, etc. which have been in short supply. A serious lacuna observed in regard to progress of the urban water supply programme is that schemes of drainage and sewerage are not undertaken simultaneously with those of water supply, with the consequence that sanitary conditions have deteriorated and in some cities incidence of flaria has increased. It is important to ensure that schemes of water supply are not formulated or sanctioned unless such schemes are integrated with drainage schemes. Another matter to which more attention needs to be paid in coming years is the accelerated implementation of water supply and drainage schemes in border areas.

17. *Rural Water Supply.*—In the Third Plan, considerable stress was laid on the need of carrying out surveys in the States with a view to making a correct assessment of the existing state of rural water supply and for preparing concrete programmes. As most of the States did not make a provision in their Plans for such surveys, the Central Government has sponsored a scheme for the establishment of a special investigation division in each State for collecting data in regard to rural water supply specially in regard to the nature of the problem, the existing facilities, the priorities to be observed, etc. Eleven States have agreed to set up the divisions and investigations in some of them are in progress. At the Centre, arrangements for coordination between the different Ministries concerned with rural water supply have been made by setting up a Coordination Committee consisting of the representatives of the concerned Ministries and the Planning Commission.

18. *Family Planning Programme.*—In the Third Plan, a provision of Rs. 27 crores has been made for the family planning programme. The expenditure on the programme has gone up from Rs. 1·02 crores in 1960-61 to Rs. 2·42 crores in 1961-62, Rs. 3·14 crores in 1962-63 to Rs. 3·27 crores (budgeted) in 1963-64.

19. The number of family planning clinics at the end of the Second Plan was 2,136 (1,379 rural and 757 urban). During the first two years of the Third Plan 209 urban and 660 rural clinics have been added bringing

the total number of clinics to 3,005. Facilities for free sterilisation operations have been made available on a fairly wide scale in several hospitals, maternity centres and other medical and health centres in the States. It is reported that by February 1963, 3·35 lakh persons were sterilised.

20. A large-scale family planning programme has necessarily to be supported by indigenous manufacture of contraceptives. While production of chemical contraceptives has been satisfactory, hardly any progress has been made in the manufacture of rubber contraceptives. Measures are being taken to increase the indigenous production of contraceptives and to make them available at reasonable prices to all those who wish to use them. Besides the clinics, 4,735 rural and 701 urban medical institutions have distributed contraceptives during the first two years of the Third Plan.

21. Studies made on family planning practices and attitudes so far have shown strong evidence of potential receptivity for the programme. A good deal has been done to increase general awareness of family planning through distributing of posters, fodders and pamphlets, the exhibition of films in English and in regional languages and other audio-visual media. Among the educational methods the one which has appeared to be very promising is the holding of family planning orientation camps.

22. Training has been organised in 16 regional family planning training centres in the States. Peripatetic training teams have also been set up in the States to provide training to health personnel posted in hospitals, dispensaries and primary health units. By March 1963, 27,483 persons had been trained under the various programmes.

23. An extended programme of research has also been undertaken which includes studies of human genetics, study in physiology of reproduction, development of more effective local contraceptives, development of suitable oral contraceptives and follow-up of sterilisation cases to investigate possible after-effects. An expert committee on oral contraceptives has been appointed to review periodically the development in this field and to make recommendations. A committee to guide communication, motivation and action research in family planning is also functioning.

24. From the above review it will be seen that progress has been made in respect of the various items of the programme. Yet, in view of the colossal nature of the problem to be tackled and time required to develop vast organisational network to approach millions of families and to organise the manufacture of contraceptives and distribution of supplies, the total impact of the programme, specially in rural areas, has not been striking so far. The various problems connected with the expansion of the programme will be reviewed in coming months by a Family Planning Programme Evaluation and Planning Committee which will suggest ways and means for improvement and formulate concrete proposals.

CHAPTER XVII

HOUSING AND URBAN AND RURAL PLANNING

THE problem of housing, specially in urban and industrial areas, has grown cumulatively for many years; and such action as the Central and State Governments and local authorities have so far found practicable has made only a limited impression on the problem as a whole. While planned development has led to a greater economic and industrial activity and has increased the influx into towns and cities, the shortage of housing has been steadily accentuated. It was against this background that the Third Plan emphasised the importance of a comprehensive and systematic approach to the problem of housing and dispersal of economic activity and coordination of the efforts of all the agencies on the basis of master plans for urban areas. Institutional arrangements could enable large numbers of persons, many of them with small incomes, to build or acquire houses for themselves, supported by effective town planning, are indispensable if living conditions for the bulk of the people in most towns and cities are not to deteriorate further.

2. *Master Plans.*—For securing orderly development of towns and cities, the first step was to arrange for the preparation of master plans for all metropolitan cities, State capitals, port towns, new industrial centres and other large and growing cities. State Governments have taken in hand the preparation of master plans for a number of major cities and towns. The master plans for Delhi, Gauhati, Patna and Cuttack have been completed and interim plans have been drawn up for Hyderabad, Visakhapatnam, Guntur, Ranchi, Bokaro and Barauni. Plans for 35 other towns are under preparation.

3. The master plan for the Delhi metropolitan region, which includes the Union Territory of Delhi as well as the towns of Ghaziabad, Ballabgarh, Gurgaon, Bahadurgarh, Loni and Faridabad has been approved. The plan has a twenty year perspective. Over this period the population of the Delhi metropolitan area is expected to grow from 31 lakhs to 60 lakhs, of which about 8 lakhs may be in towns outside the Union Territory A high-powered Board comprising the Central Ministers concerned and the Chief Ministers of Uttar Pradesh and Punjab has been constituted for drawing up an integrated detailed plan of the Delhi metropolitan region and for ensuring its effective implementation.

A master plan for the development of the Calcutta metropolitan region is also being drawn up. The Calcutta Metropolitan Planning Organisation has completed a preliminary survey of the area and decisions on a number of urgent schemes of water supply and drainage have been already taken.

4. *Land acquisition and development.*—High land prices are the principal factor in raising housing and other costs and in restricting the scale on which improvements in housing can be undertaken. A fair share of the resources available for housing under the Third Plan was, therefore, allocated for land acquisition and development. This scheme was introduced in 1959 and was financed wholly by the Central Government until 1961-62. Now it is being financed from loans made available by the Life Insurance Corporation. A sum of Rs. 10·6 crores was drawn by State Governments during the first two years. About 5,600 acres of land have been notified, of which about 4,000 acres are to be acquired by March 1964. In Delhi, a revolving fund has been created for the acquisition and development of land. About 52,000 acres of land have been so far notified for acquisition; of this about 8,000 acres are to be developed by the end of the Third Plan period. In the larger cities revolving funds for bulk acquisition and development of land can, with proper machinery for land acquisition and town planning, be a useful means of controlling rise in land prices and making house-sites available to low income groups.

5. *Outlay and Progress.*—An outlay of Rs. 202 crores (including Rs. 60 crores to be made available by the L.I.C.) was provided for housing and urban development schemes in the Third Plan. The table below briefly indicates the progress of expenditure :

Progress of expenditure on housing schemes

(Rs. lakhs)

Scheme	Third Plan provision	Expenditure 1961-62	1962-63	1963-64	Total 1961—64
1. Subsidised industrial housing scheme	2,980	561	578	268	1,407
2. Low income group housing scheme	3,520	539	540	368	1,447
3. Slum clearance scheme ..	2,862	347	563	599	1,509
4. Village housing projects scheme	1,270	58	166	68	292
5. Plantation labour housing scheme	70	2	14	5	21
6. Dock labour housing	200	—	—	—	—
7. Middle income group housing in Union Territories ..	250	26	37	35	98
8. Land acquisition and development	950	475	240	150	865
9. Experimental housing, research and statistics	100	—	—	—	—
10. Housing schemes of State Governments	180	—	18	26	44
11. Town planning including preparation of master plans ..	540	34	71	47	152
12. Urban development ..	1,230	204	262	168	634
13. Schemes financed from L.I.C. funds	6,000	600	1,135	1,059	2,794
TOTAL	20,152	2,846	3,624	2,793	9,263
		14%	18%	14%	46%

Funds provided by the Life Insurance Corporation were being utilised so far only for financing middle income group housing, rental housing and the land acquisition and development. L.I.C. funds are now being allotted to States in bulk and it is left to their judgment which schemes will be financed by them from this source.

6. The folowilng table* shows the progress in respect of certain schemes :

Scheme	Unit	1961—66	1961—64
1. Subsidised industrial housing scheme ..	No. of houses	73,000	31,700
2. Low income group housing scheme	Do.	75,000	29,000
3. Slum clearance scheme	Do.	1,00,000	45,600
4. Village housing projects scheme	Do.	1,25,000	16,500

7. *Subsidised industrial housing scheme.*—This scheme is being implemented by three different agencies, namely, State Governments, private employers and cooperative societies of industrial workers. Although the percentage of construction by employers and cooperative societies has shown a slight increase in the Third Plan as compared to the Second Plan, about 80 per cent of the houses for industrial workers are being built by State Governments themselves. The performance of the employers has been particularly disappointing. Unless they undertake construction of houses for their workers on a large scale, housing conditions of industrial workers are not likely to improve significantly. State Governments have been asked to encourage employers to build houses for workers by availing of 75% assistance from the Government (50% as loan and 25% as subsidy), or alternatively, by giving their 25% contribution to the Government for the cost of construction of houses. The main difficulty experienced by cooperatives has been the lack of developed land near industrial areas. As a result of the progress of the land acquisition and development schemes, in some States it is now becoming possible to allot lands to cooperatives of industrial workers for the construction of houses.

8. *Low income group housing.*—On the whole progress under the low income group housing scheme has been satisfactory. In addition to loans to private individuals, it is proposed that houses built under the scheme by State Governments or Housing Boards in composite neighbourhoods or other colonies may be sold outright or on hire-purchase terms to persons from low income groups. In pursuance of a recommendation in the Third Plan, a scheme for rental housing was introduced a year ago for the benefit of economically weaker sections of the community having an income up to Rs. 175 a month (Rs. 250 a month for persons living in Delhi, Calcutta and Bombay). Up to 25% of the amount allocated for the scheme is

*The figures in this table do not include the number of houses under construction.

given by way of grant for subsidising the rent of the tenements. State Governments and local bodies are also expected to contribute by meeting departmental charges, local taxes, etc.

9. *Slum clearance and improvement.*—Since the introduction of the slum clearance scheme in May 1956, in all 289 projects have been approved. These involve construction of 82,500 units at an estimated cost of Rs. 26 crores. As proposed in the Third Plan, the main effort is concentrated in the six cities, namely, Calcutta, Bombay, Madras, Delhi, Ahmedabad and Kanpur. The cost of the projects undertaken in these cities comes to about Rs. 19 crores. In addition, slum clearance projects are being carried out in several other towns, notably, Madurai, Coimbatore, Salem, Bangalore, Gauhati, Trivandrum, Ernakulam, Quilon, Poona, Nagpur, Patna, Jaipur, Allahabad, Varanasi and Lucknow. The main impediments have been the delay involved in acquisition of slum areas, non-availability of alternative sites at reasonable cost near existing places of work, inability of slum dwellers to pay even the subsidised rents and their general reluctance to move far from areas in which they are now residing partly due to lack of cheap transport facilities. A number of State Governments have enacted legislation permitting speedy acquisition of slum areas and properties at reasonable rates.

10. In a number of recent schemes for slum clearance and improvement, greater stress is being placed on improvement of slum areas and provision of the basic amenities for slum dwellers. In case a slum area has to be cleared, efforts are made to provide alternative accommodation to slum dwellers at or near the existing sites. For such slum dwellers as cannot afford to pay even the subsidised rent of pucca tenements, provision is being made for construction of skeletal houses and hostel and dormitory type of accommodation including night shelters. In cities like Delhi, Ahmedabad, Bangalore and Agra, night shelters under the management of voluntary organisations like the Bharat Sevak Samaj are being encouraged.

It is suggested that, as recommended in the Third Plan, State Governments should arrange for surveys of slum areas and distinguish those which are to be redeveloped and those for which improvement schemes are to be undertaken.

11. *Village Housing.*—The village housing scheme envisages remodelling of selected villages on an aided self-help basis. Out of 50,000 villages selected under the scheme, lay-out plans have been drawn up for 3,000 and socio-economic surveys have been completed for 2,600 villages. The Third Plan emphasised the responsibility of the village community for providing house-sites for weaker sections of the population and, in particular, for landless agricultural workers. It was recognised that in congested villages, specially those with a large proportion of landless workers, it would be

necessary to supplement the efforts of the local community. Accordingly, in pursuance of a recommendation in the Third Plan, Panchayat Samities and Village Panchayats are being enabled to acquire adidtional lands for house-sites to landless agricultural workers. One-third of the allocation made to State Governments under the Village Housing Projects Scheme is to be treated as subsidy for providing house-sites for landless workers. Financial assistance in the shape of grants is also being given to villages for providing streets and drains.

12. *Plantation labour housing.*—There has been little response from planters in building houses for their workers in accordance with the present scheme. Apart from the difficulty of providing adequate security, the planters have asked for a number of other concessions, including subsidy and income-tax rebate, to enable them to provide housing accommodation to their workers. The Ministry of Labour and Employment have recently constituted a Working Group to go into the whole question of finance and devise ways and means of ensuring speedy construction of houses for plantation workers.

13. *Dock labour housing.*—A scheme for the housing of dock labour has been recently formulated. It is proposed to allow to Dock Labour Boards a subsidy of 20% and loan assistance up to 35% of the cost of a house, subject to certain prescribed ceilings.

CHAPTER XVIII

WELFARE PROGRAMMES

1. Welfare of Backward Classes

Special measures for the welfare of Backward Classes, which include both Scheduled Castes and Scheduled Tribes, are intended to be supplementary to the benefits which these classes derive from the general development programmes. The Planning Commission has repeatedly emphasised in its Report the importance of ensuring that the Backward Classes get adequate benefits from the general programmes and that the special programmes to be financed from the plan provisions should not be used as a substitute for the measures necessary to enable these classes to get due advantage from the general programmes. This objective could, perhaps, be secured by having built-in arrangements for the purpose in general development programmes.

2. Of the Rs. 114 crores plan provision for the Backward Classes, Rs. 35 crores under Central schemes and Rs. 79 crores under State schemes, the estimated expenditure during the first three years of the plan period shows a higher proportion of plan outlay in the case of Centre, the relevant percentage being 49.2 as against 42.3 for the States. One reason for the slower pace of expenditure under the States' scheme is, of course, the emergency. There has been a certain measure of inadequate implementation from the start.

3. Category-wise outlays in the first three years of the Third Plan indicate a higher rate of fufilment in the case of Scheduled Castes, which is a little over 50% of the plan provision as compared to 46·6% in respect of Scheduled Tribes. It is even lower in the case of Denotified Tribes and Other Backward Classes for whom the percentage utilisation is only 21.

4. The Third Plan envisages a higher priority for economic development programmes for the Backward Classes as compared to education and other schemes. In practice, however, the State Governments have found it necessary to shift the emphasis to educational schemes in the case of the Scheduled Castes mainly because of the difficulty inherent in formulating development programmes which are not area-oriented. The number of post-Matric scholarships awarded has arisen from 44,778 in 1960-61 to 62,500 in the current year; there has also been some diversification in the awards in favour of technical and special courses. Out of the provision of Rs. 360 lakhs, Rs. 198 lakhs has already been spent in the first two years, leaving only Rs. 162 lakhs for the remaining three years of the Plan. This indicates

clearly that the rate of utilisation of the special facilities for education made available to the Scheduled Castes is increasing apace and will soon outpace the plan provision.

5. In the case of Scheduled Tribes, the major programme consists of area-oriented development on the basis of Tribal Development Blocks. Against a target of 330 Tribal Development Blocks in the Third Plan, 70 Blocks have been started by the end of the second year and another 65 are being started in the current year. In addition, as a result of the recommendations of the Scheduled Areas and Scheduled Tribes Commission, 40 new Blocks have been added to the programme for the current year, the target itself being raised by 120 Blocks for the whole of the Third Plan period. Adequate data are not yet available on the benefits obtained by the tribal people in terms of their economic development as a result of this programme. In view of the important place which these Blocks occupy in the economic and social development of the tribal classes, it is necessary to make a careful assessment of their working.

6. The other major programme for the tribal classes relates to education and scholarships. Against a plan provision of Rs. 200 lakhs for post-Matric scholarships, the amount actually spent during the first two years of the Plan comes to only Rs. 34 lakhs or 17% as against 55% in respect of scholarships for Scheduled Castes. It is desirable that State concerned should make some special enquiry into the reason for this low utilisation of education provision by the Scheduled Tribes and take such steps as are necessary for getting them to take more advantage of the same. In the last analysis, both the economic and social uplift of the tribal classes will turn on the extent to which they are able to get better educational equipment than they have at present.

7. An analysis of the performance during the first two years of the plan period brings out clearly the need for advance arrangement for the training of personel, improvement in the terms and conditions of service of personnel working in remote tribal areas, and more socio-economic research on the conditions and problems of both the Scheduled Castes and Scheduled Tribes.

2. Social Welfare

8. The Third Plan contains a provision of Rs. 28 crores for Social Welfare, with an extra provision of Rs. 3 crores for special Child Welfare programmes, thus taking the total to Rs. 31 crores. Excluding this additional provision, the remaining Rs. 28 crores is split up between Central and State schemes, Rs. 16 crores for the former and Rs. 12 crores for the later.

The statement below summarises the progress of expenditure under Central and State schemes.

(Rs. lakhs)

	Third Plan provision	1961-62 (Actuals)	1962-63 (Anticipated)	1963-64 (Budget proposals
1	2	3	4	5
Central schemes	1,600	214·90	253·89	267·41
State schemes	1,200	64·80	79·30	97·17
TOTAL	2,800	279·70	333·19	364·58

It will be seen that progress in expenditure has not been satisfactory with nearly 2/3rds of the plan provision still to be utilised in the remaining two years of the plan period. Whereas Central schemes are likely to account for 46% expenditure incurred on them during the first three years, the corresponding figure for the State schemes is only 20%. While this may be ascribed, partly to emergency, the major cause for delay is lack of advance planning, insufficient attention to training programmes and failure to take steps to speed up the performance of voluntary organisations. While the bulk of social welfare programmes are not of such magnitude as the situation calls for, they do make a beginning. It is, therefore, important to see that even this admittedly inadequate effort is not further diminished by delays in implementation and slower utilisation of the plan provisions made for the purpose.

9. A notable feature revealed by a scrutiny of the implementation of the Social Welfare programmes shows a higher degree of utilisation in the case of programmes which involve mainly voluntary organisations as opposed to programmes which are directly administered by governmental agencies. Even in the case of the former, performance seems to be better in the case of sponsored programmes It is also significant that the largest shortfall in expenditure is in the programme of training, research and survey, where, as against the Plan provision of Rs. 35 lakhs, expenditure incurred during the first two years was only Rs. 1·4 lakhs and expenditure contemplated even for the current year is only Rs. 2 lakhs. There is a clear need for taking vigorous action in regard to research and training including the necessary personnel on the one hand and on the other, action for promoting the efficient working of voluntary organisations. Both these aspects are now under review by the Working Group on Social Welfare appointed by the Planning Commission.

10. The socio-economic schemes for women sponsored by the Central Social Welfare Board have made good progress in the first three years of the Third Plan period. Progress has also been noticed in the programmes for women and children under the State sector as also in After-care Homes,

district shelter/reception centres and protective homes under Suppression of Immoral Traffic Act. An important new scheme in the Third Plan is the integrated Child Welfare Demonstration Project. These projects are intended to bring together in selected areas all the services, such as, health, education, recreation, etc., which have a bearing on all round development of children. Most of the services have to be provided by the concerned Departments. The Project Implementation Committee only supplements out of its budget the elements lacking in the other programmes and ensures proper co-ordination of all the services. While it has taken some time to organise these projects, and some delay has also been caused by the emergency, it is satisfactory to note that despite the emergency, the programmes have now gathered momentum; 17 projects having been sanctioned so far covering all the States and some of the Union Territories.

11. Attention may also be drawn to the manner in which some of the Social Welfare schemes have been re-oriented in the light of the emergency. For example, the Central Social Welfare Board has drawn up special welfare programmes for the border areas including both N.E.F.A. and Ladakh and are going ahead with getting them implemented. There was also a considerable mobilisation of voluntary effort during the early months of the emergency for providing amenities and welfare facilities for the families of defence personnel.

3. Public Cooperation and Participation

12. The role of public cooperation in securing rapid economic and social development was set out in the Third Plan. The Plan provided a sum of Rs. 8·2 crores mainly for strengthening voluntary organisations and enabling them to undertake larger responsibilities. Over the years, emphasis in voluntary service has been shifting from welfare in the limited sense of the term to realisation of broader social and economic aims. In particular, voluntary organisations have to equip themselves to work closely with co-operatives and Panchayati Raj institutions and assist them in every way possible. During the first two years of the Plan, under the general guidance of the National Advisory Committee for Public Cooperation, the Bharat Sevak Samaj and a number of other social service agencies have carried out useful tasks and expanded their activities. Increasingly, educational institutions, hospitals, trade unions, individual social workers and other organisations have sought ways of enlisting greater cooperation and contribution from the community. In turn, this has helped in gaining goodwill and support from the community for these institutions. The possibilities of public cooperation are in no sense limited to the specific schemes or areas in which assistance is given by the Centre or the States from funds provided under the Plan. In every field of development there is a great deal of constructive contribution on the part of voluntary organisations and individual workers which cannot come into any precise reckoning.

13. At the end of the Second Plan, about 100 voluntary welfare projects, commonly known as Lok Karya Kshetras, were functioning in rural areas and 30 in urban areas. There are at present 350 such projects in rural areas and 38 in urban areas. Lok Karya Kshetras have been able to develop a fairly large cadre of trained full-time and part-time workers. Their activities have helped in securing a greater measure of interest and initiative at the local level and stimulated voluntary action in several community development areas. The development of the Lok Karya Kshetras programme is being accompanied by careful evaluation of the work being done, the problems encountered and methods of enlisting public cooperation. Particular attention is given to assisting groups of persons to organise activities, on their own, on the basis of self-help. In several areas Lok Karya Kshetras have derived valuable help from educational and other institutions and, in turn, enabled them to reach out more effectively to the community. The Central Lok Karya Committee which guides the programme, ensures co-ordination among the participating organisations. In recent years, the need for systematic training of voluntary workers has been stressed. Two Lok Karya training centres, located at Delhi and Trivandrum, have trained about 500 workers belonging to different voluntary organisations during the past two years. A proposal to set up a Central Training and Research Institute to further strengthen voluntary organisations has been accepted. Methods and techniques for enlisting public cooperation evolved in successful project areas are being studied through research schemes and seminars of workers in different fields.

14. In the Third Plan reference was made to the contribution which voluntary organisations and labour cooperatives could make in construction projects. There has been considerable progress in this field since the beginning of the Plan. For instance, the Construction Service organised by the Bharat Sevak Samaj has undertaken works of the value of Rs. 10 crores with appreciable saving to the Government. During 1963-64 also, works of the value of about Rs. 10 crores are expected to be taken up. Apart from direct economies, the activities of the Construction Service have led to certain indirect advantages as well, such as helping to maintain prices of bricks and building materials at reasonable levels, influencing rates in the construction industry, maintaining standards of work and inducing public authorities to simplify administrative and financial procedures. It has been found that in many areas completion of works by the Construction Service of the Bharat Sevak Samaj has left behind a pool of local skill and experience which has, in turn, encouraged voluntary organisations at the local level to take up construction work and other allied activities. This has created greater self-reliance in the communities concerned.

15. Planning Forums in universities and colleges are an important means of enabling teachers and students to contribute towards national development and of carrying forward the message of the Plan. There are now

650 such Planning Forums. In their work special emphasis is being given to the problems of development and programmes of the areas in which the institutions are situated. In many cases, besides undertaking surveys, Planning Forums have associated themselves with particular villages and communities so as to be ble to participate continuously in constructive work. With voluntary contribution in labour from students, a scheme for the construction of 1,000 rifle ranges is being implemented in universities and colleges under the aegis of the University Grants Commission in collaboration with the Central Citizens' Council.

16. In pursuance of the programme for prohibition outlined in the Third Plan, the Central Government have agreed to reimburse to States over the plan period 50 per cent of any loss on account of excise revenue arising from extension of prohibition. A Study team is at present engaged in examining how prohibition programmes could be more effectively implemented. Recently 52 Lok Karya Kshetras for educational work in respect of prohibition have been approved.

17. The emergency, which began in October 1962, provided additional opportunities of service to voluntary organisations. A number of important construction works had to be carried out in forward areas where private contractors were not available. The Construction Service of the Bharat Sevak Samaj placed its resources at the disposal of the Government and undertook the construction of two aerodromes and a group of barracks, besides assisting in certain other defence works. More than 40 Lok Karya Kshetras were established in border areas and a number of trained workers were made available. Assistance is also being rendered to families of defence personnel and in the rehabilitation of disabled ex-Service men. Voluntary organisations are also assisting in price vigilance work and in the organisation and development of consumer cooperatives.

APPENDIX

Statement of the National Development Council on the mid-term appraisal of the Third Five Year Plan

At its twentieth meeting held on November 8 and 9, 1963, the National Development Council considered the Planning Commission's report on the mid-term appraisal of the Third Five Year Plan. Although in a number of directions significant progress had been made since the beginning of the Third Plan, the period was one of slow economic growth. In particular, partly on account of unfavourable weather conditions, there had been a setback in agriculture and, on present indications, the output of foodgrains, cotton and oilseeds was likely to fall short of estimates in the Third Plan. The Council broadly agreed with the findings and recommendations of the Planning Commission and decided that the Central and State Governments should proceed, as a matter of urgency, to take all necessary steps to correct the existing deficiencies and ensure the realisation of the objectives and targets of the Third Plan.

The Council reviewed the progress of agricultural production in different States during the past two years and the broad lines along which efforts should be intensified. The highest priority should be given to agriculture, for, a stable and progressive agricultural economy constitutes the essential foundation even for the growth of industry. Proposals for securing the fullest coordination in agricultural production programmes between different agencies at the State, district and block level which were recently made by the Working Group set up by the Joint Conference of State Ministers of Agriculture and Community Development had been already commended to State Governments for necessary action. With a view to ensuring an integrated approach in matters of agricultural policy on behalf of the Central Government, it was proposed shortly to constitute at the national level an agricultural Production Board with the Minister of Food and Agriculture as Chairman and comprising the Ministers of Planning, Agriculture, Community Development and Cooperation and Irrigation and Power and Member for Agriculture in the Planning Commission. The Council stressed the need for special measures to increase the production of foodgrains, cotton, oilseeds and other commercial crops. It was recommended that in areas with irrigation and assured rainfall and specially in areas selected for intensive development, concentrated efforts should be made to secure rapid increase in production. Special attention should be given to extension work at the level of the village, efficient arrangements for supplies and technical advice, provision of credit, introduction of improved implements and machinery and strengthening of the cooperative movement. Increasing use should be

made of institutions engaged in agricultural research, education and training and of progressive farmers in developing extension activities. The farmer should be assured an adequate return for his labour and investment. This would give to him the necessary incentive for increased production and higher yields.

During the next two years minor irrigation programmes should be expanded to the extent possible, and from this aspect, facilities for the extension of rural electrification should also be developed. Fertilisers were being made available on a steadily increasing scale and efforts should continue to obtain such further supplies as could be utilised. There should be efficient arrangements for the distribution of fertilisers, as far as possible through cooperatives, and the necessary credit should be assured. At the same time, effective action should be taken to implement the programmes for composting and green manuring. Soil conservation programmes have not made adequate progress in a number of States and steps should be taken to strengthen the State organisations and expanding training facilities. It was also essential to make available larger amounts of medium and long-term credit. In addition to agricultural production programmes, there should now be greater emphasis on animal husbandry, dairying and fisheries. It was specially important that over the rest of the plan period such additional resources as might be required should be made available for programmes for the development of agriculture and cooperation. Care should be taken to see that the resources provided for agricultural development were put to the most efficient use. The manpower resources of the village, including those offered by the Village Volunteer Force, should be utilised to the fullest extent. The National Development Council felt confident that if these and other steps outlined by the Planning Commision were implemented at all levels with a sense of urgency, it should be possible in large measure to fulfil the development programmes of the Third Plan and to reach the levels of production envisaged in it.

The Council also reviewed progress in the implementation of land reforms in different States. On account of legal, administrative and other factors, in some States, the legislation had not been fully enforced. The Council considered that the speedy execution of the programme of land reform was vital for increasing agricultural production and strengthening the rural economy, and called upon all State Governments to complete the implimentation of the land reform programmes before the end of the Third Plan.

The Council observed that the execution of a number of large projects, specially in irrigation and power, was being spread over longer periods than had been postulated in the Third Plan. Every effort should, therefore, be made to speed up the completion of projects likely to yield early benefits.

The Council noted that small industries and industrial estates generally had suffered for want of scarce raw materials specially since the onset of the emergency, and agreed that special steps should now be taken to increase the supply of raw materials. The Council also observed that while expansion in the field of education and health had taken place generally on lines indicated in the Plan, qualitative aspects needed much greater attention. The key importance of stabilising the growth of population and the need for a considerably enlarged programme of family planning were stressed. The malaria eradication programme has made satisfactory progress and it is now essential to ensure adequate provisions for its continuance and maintenance phase in the annual plans of States. It was further recommended that elementary needs of the people such as supply of drinking water in rural areas and urgent social problems like slums and unsatisfactory living conditions should receive special consideration in carrying out development plans. Moreover, the relatively less developed regions in different States present special problems and call for sustained and integrated development.

Finally, the National Development Council decided that, in the light of the Planning Commission's appraisal report, State Governments and Central Ministries should take specific measures to improve their machinery for planning, raise the levels of administrative efficiency and strengthen the implementation of development programmes in different sectors.

November 9, 1963.

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